Part 8 Overlays

8.1 Preliminary

(1) Overlays identify areas in the planning scheme that reflect state and local level interests and that have one or more of the following characteristics:

(a) there is a particular sensitivity to the effects of development

(b) there is a constraint on land use or development outcomes

(c) there is the presence of valuable resources

(d) there are particular opportunities for development.

(2) Overlays are mapped and included in **Schedule 2 Mapping**.

(3) The changed category of assessment, if applicable, for development affected by an overlay are in Part 5.

(4) Some overlays may be included for information purposes only. This should not result in a change to the category of assessment or any additional assessment benchmarks.

(5) Assessment benchmarks for an overlay may be contained in one or more of the following:

(a) a map for an overlay;

(b) a code for an overlay;

(c) a zone code;

(d) a local plan code;

(e) a development code;

(6) Where development is proposed on premises partly affected by an overlay, the assessment benchmarks for the overlay only relate to the part of the premises affected by the overlay.

(7) The overlays for the planning scheme are:

(a) Agricultural Land Overlay;

(b) Airport Environs and Defence Land Overlay;

(c) Bushfire Hazard Overlay;

(d) Environmental Significance Overlay;

(e) Extractive Resources Overlay;

(f) Flood Hazard Overlay;

(g) Landslide Hazard and Steep Slope Overlay;

(h) Local Heritage Overlay;

(i) Regional Infrastructure Overlay;

(j) Water Resource Catchments Overlay; and

(k) Master Plan Areas Overlay.

(8) The following overlays for the planning scheme are without codes and are for information or administrative purposes only:

(a) Transport Noise Corridor Overlay

(b) Minimum Lot Size Overlay

(c) Higher Order Roads Overlay

(d) Road Hierarchy Overlay

8.2 Overlay Codes

8.2.1 Agricultural Land Overlay Code

8.2.1.1 Application

This code applies to development:

(1) within the Agricultural Land Overlay as identified on the overlay maps contained in **Schedule 2 Mapping**; and

(2) identified as requiring assessment against the Agricultural Land Overlay Code by the tables of assessment in **Part 5 Tables of Assessment**.

***Note** - For the purposes of this Planning Scheme, 'significant agricultural land' means the land shown on the **Agricultural Land Overlay Map OM-01** as Agricultural Land Classification (ALC) Class A and Class B land.*

8.2.1.2 Purpose and Overall Outcomes

(1) The purpose of the Agricultural Land Overlay Code is to:

- (a) protect *significant agricultural land* in the Rural Zone for agricultural uses;
- (b) protect *significant agricultural land* in the Rural Zone from fragmentation, alienation or diminished agricultural productivity;
- (c) minimise the potential for conflict between agricultural and other uses on *significant agricultural land*; and
- (d) facilitate development for agricultural purposes on *significant agricultural land* in the Rural Zone.

(2) The purpose of the code will be achieved through the following overall outcomes:

- (a) The ongoing productive use of *significant agricultural land* for agricultural purposes is maintained and protected by ensuring that:
  - (i) land uses that conflict with the agricultural production of land are avoided;
  - (ii) development that leads to diminished productivity of *significant agricultural land* is avoided unless a planning need exists for the development to occur and the area lost from production is minimised to the greatest extent possible; and
  - (iii) where development impacts *significant agricultural land,* such impacts are to be mitigated to ensure a no net loss in the utility and or availability of *significant agricultural land;*
- (b) Where the development will result in permanent impacts on *significant agricultural land* and there is an overriding need for the development, the permanent impacts on *significant agricultural land* are:
  - (i) avoided to the greatest extent possible; and
  - (ii) minimised where the impacts cannot be avoided; and
  - (iii) mitigated where the impacts cannot be avoided;
- (c) Where the development and any subsequent use is temporary and results in temporary impacts on *significant agricultural land*:

(i) the development and any subsequent use is undertaken within a time limit appropriate to allow restoration of impacted land to its pre-development condition at the conclusion of the development and any associated use; and

(ii) any impacted *significant agricultural land* is restored to its pre-development condition within that timeframe;

(d) Reconfiguring a lot does not result in fragmentation of *significant agricultural land*, except where it has been assessed that there is an overriding need in the public interest for a related material change of use and the reconfiguring of a lot is consistent with the material change of use;

(e) Where the development is located in the Agricultural Land Buffer Area, there is an adequate separation area included in the design and layout of the development to prevent any impact from agricultural activities on the amenity or use of the occupants of the development.

***Note** - For the purposes of this Planning Scheme, 'significant agricultural land' means the land shown on the **Agricultural Land Overlay Map OM-01** as Agricultural Land Classification (ALC) Class A and Class B land.*

8.2.1.3 Assessment Benchmarks

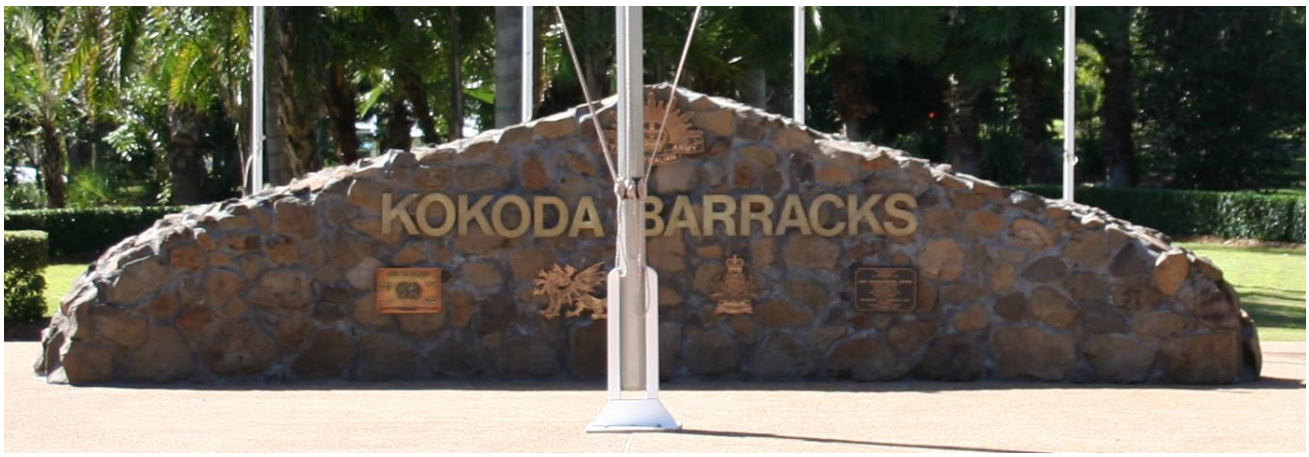
Table 8.2.1.3.1— Agricultural Land Overlay Code - Assessable Development

Performance Outcomes	Acceptable Outcomes
Land uses on *significant agricultural land*	
PO1 Uses that lead to the loss or degradation of *significant agricultural land* from production are avoided unless: (1) the use facilitates an increase or improves the efficiency of agricultural production; or (2) development is only for rural activities and complementary *rural activities*, except where an overriding need exists for the development to occur, the area lost from production is minimised and there is no viable alternative where impacts on *significant agricultural land* can be avoided; and (3) the area lost to agricultural production is minimised to the greatest extent possible. ***Note** - An Applicant may seek to demonstrate through the submission of a report, prepared by a suitably qualified professional, that the site does not contain the attributes of significant agricultural land as shown in **Agricultural Land Overlay Map OM-01**.*	**AO1.1** Development on *significant agricultural land* identified on the **Agricultural Land Overlay Map OM-01** involves any of the following land uses: (1) *Animal husbandry;* (2) *Animal keeping;* (3) *Aquaculture;* (4) *Cropping;* (5) *Dual occupancy;* (6) *Dwelling house;* (7) *Home based business;* (8) *Intensive animal industry (excluding buildings);* (9) *Intensive horticulture;* (10) *Market;* (11) *Renewable energy facility;* (12) *Roadside stall;* (13) *Rural industry;* (14) *Rural workers' accommodation;* (15) *Wholesale nursery.*
	AO1.2 Development involving the following land uses: (1) *Agricultural supplies store;* (2) *Club;* (3) *Emergency services;* (4) *Environment facility;* (5) *Food and drink outlet;* (6) *Low impact industry;* (7) *Nature-based tourism;* (8) *Outdoor sales involving livestock saleyards;* (9) *Research and technology industry;* (10) *Rural workers accommodation;* (11) *Service industry;* (12) *Short-term accommodation;* (13) *Telecommunications facility;* (14) *Tourist attraction;*

Performance Outcomes	Acceptable Outcomes
	(15) *Tourist park;* (16) *Transport depot;* (17) *Utility installation;* (18) *Veterinary service; and* (19) *Winery,* ensures that the total area of *significant agricultural land* identified on the **Agricultural Land Overlay Map OM-01** covered by a *development footprint* is equal to or less than 1,000m².
Sensitive Land Uses	
PO2 Uses are located and designed to: (1) avoid land use conflict; (2) protect the existing and ongoing viability of the rural resource; and (3) manage the impact from agricultural activities on *sensitive land uses* (listed in **AO2**) including chemical spray drift, odour, noise, dust, smoke and ash. ***Note** - An Applicant may seek to demonstrate through the submission of report, prepared by an appropriately qualified professional, that the site does not support significant agricultural land as shown in **Agricultural Land Overlay Map OM-01**.*	**AO2** A: (1) *Child care centre;* (2) *Community care centre;* (3) *Community residence;* (4) *Community use;* (5) *Educational establishment;* (6) *Health care service;* (7) *Hospital;* (8) *Hotel;* (9) *Multiple dwelling;* (10) *Relocatable home park;* (11) *Residential care facility;* (12) *Retirement facility;* is not located in the Agricultural Land Buffer Area or *significant agricultural land* identified on the **Agricultural Land Overlay Map OM-01**. ***Editor's Note** - Part E of the State Planning Policy - state interest guideline: Agriculture, July 2014 provides technical guidance to help minimise conflict between agriculture and non-agricultural land uses.*
Reconfiguration of a Lot	
PO3 Lot reconfigurations: (1) maintain the opportunity for agricultural production on *significant agricultural land*; (2) do not result in allotment sizes that fragment, alienate or result in loss or diminished productive capacity of *significant agricultural land*. ***Editor's note** - Minimum lot sizes for each lot must enable continued agricultural viability. Minimum lot sizes should ensure that resulting farm sizes are sufficiently large to allow for a range of crop options over the long-term.*	**AO3** No acceptable outcome is prescribed.
PO4 Where realigning the boundaries of a lot on, or adjacent to *significant agricultural land*, the realignment: (1) results in a more productive use and management	**AO4.1** The number of new lots, including the balance of the area, is equal to or less than the total number of original lots.

Performance Outcomes	Acceptable Outcomes
of *significant agricultural land* and water for agricultural uses; and (2) does not lead to increased fragmentation of *significant agricultural land* and does not increase the potential conflict between agricultural and non-agricultural land uses.	**AO4.2** Provision of adequate separation area between any small lots and nearby agriculture is provided by the new development to ensure nearby *significant agricultural land* is protected.

8.2.2 Airport Environs and Defence Land Overlay Code



8.2.2.1 Application

This code applies to development:

(1) within the Airport Environs and Defence Land Overlay as identified on the overlay maps contained in **Schedule 2 Mapping**; and

(2) identified as requiring assessment against the Airport Environs and Defence Land Overlay Code by the tables of assessment in **Part 5 Tables of Assessment**.

8.2.2.2 Purpose and Overall Outcomes

(1) The purpose of the Airport Environs and Defence Land Overlay Code is to ensure that development does not compromise aircraft safety of strategic airports, the efficient functioning of aviation facilities or the continued viability of defence land.

(2) The purpose of the code will be achieved through the following overall outcomes:

- (a) Development does not create incompatible intrusions or compromise aircraft safety in the operational airspace (Height Restriction Zones and Wildlife Buffer Areas) of strategic airports;
- (b) Development in Building Restricted Areas, does not adversely affect the functioning of aviation facilities; and
- (c) Development in the Defence Land Buffer Area:
  - (i) does not result in uses incompatible with the defence land;
  - (ii) is designed and sited to not adversely affect the safety and operational efficiency of defence operations; and
  - (iii) attenuates noise from defence operations.

8.2.2.3 Assessment Benchmarks

Table 8.2.2.3.2— Airport Environs and Defence Land Overlay Code - for Accepted and Assessable Development

Performance Outcomes	Acceptable Outcomes
Height Restriction Zone	
PO1 Development located in a Height Restriction Zone does not create a permanent or temporary physical or transient obstruction in an operational airspace.	**AO1.1** Sport and recreational aviation activities including parachuting, hot air ballooning and hang-gliding do not occur within a Height Restriction Zone.
	AO1.2

<table>
<tr><th>Performance Outcomes</th><th>Acceptable Outcomes</th></tr>
<tr><td></td><td>The height of buildings, structures and mature landscaping is no greater than 45m (above natural ground level) in Height Restriction Zone A and 90m (above natural ground level) in Height Restriction Zone B.</td></tr>
<tr><td></td><td>AO1.3
Cranes and other equipment used during construction are of a height no greater than 45m in Height Restriction Zone A and 90m in Height Restriction Zone B.

Editor's note - Encroachments of a height greater than 45m in Height Restriction Zone A and 90m in Height Restriction Zone B must be referred to the Department of Defence (DoD) for assessment.</td></tr>
<tr><td rowspan="3">PO2
The emissions from the development do not significantly increase air turbulence, reduce visibility or compromise the operation of aircraft engines in a Height Restriction Zone.</td><td>AO2.1
Development does not emit smoke, dust, ash or steam into a Height Restriction Zone.</td></tr>
<tr><td>AO2.2
Development does not emit a gaseous plume into a Height Restriction Zone at a velocity exceeding 4.3m per second.</td></tr>
<tr><td>AO2.3
Development emitting smoke, dust, ash, steam or a gaseous plume exceeding 4.3 metres per second is designed and constructed to mitigate adverse impacts of emissions within a Height Restriction Zone.

Editor's Note - Proposals with the potential to affect visibility in a Height Restriction Zone must be referred to the Department of Defence (DoD) for assessment.</td></tr>
<tr><td colspan="2">Wildlife Buffer Area</td></tr>
<tr><td>PO3
Development does not cause wildlife to create a safety hazard within a strategic airport's operational airspace.</td><td>AO3
A land use listed in Table 8.2.2.3.4 - Land Uses That Can Attract Wildlife (which are associated with increases in wildlife strikes and hazards) and located in the Wildlife Buffer Area does not increase the potential to attract birds and bats.

Table 8.2.2.3.4- Land Uses That Can Attract Wildlife
<table>
<tr><th>High Risk Activities</th><th>Moderate Risk Activities</th></tr>
<tr><td>Rural-
(1) Cropping (turf farm);
(2) Cropping (fruit tree farm);
(3) Intensive animal industry (piggery);
(4) Aquaculture (fish processing/packing plant).</td><td>Rural-
(1) Animal husbandry; (cattle/dairy farm);
(2) Intensive animal industry (poultry farm).</td></tr>
<tr><td>Conservation-
(1) Conservation estate (eg. wetland).</td><td>Conservation-
(1) Conservation estate (all other).</td></tr>
<tr><td>Recreation-
(1) Major sport, recreation and entertainment facility (showground).</td><td>Recreation-
(1) Major sport, recreation and entertainment facility (all other);</td></tr>
</table></td></tr>
</table>

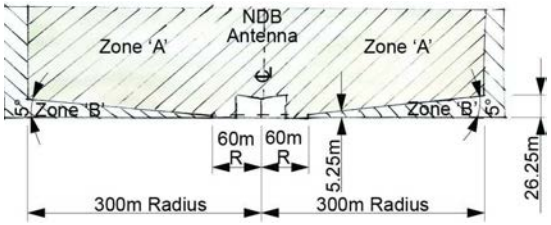
Performance Outcomes	Acceptable Outcomes
	<table><tr><td></td><td>(2) *Outdoor sport and recreation;* (3) *Park*.</td></tr><tr><td>**Industry-** (1) *Low impact industry* (food processing plant); (2) *Medium impact industry* (food processing plant); (3) *High impact industry* (food processing plant).</td><td>**Recreation-** (1) *Major, sport, recreation and entertainment facility* (all other).</td></tr><tr><td>***Utility installation-*** (1) Food/organic waste facility; (2) Putrescible waste facility (e.g. landfill, transfer station).</td><td>***Utility installation-*** (1) Non-putrescible waste facility (e.g. landfill, transfer station); (2) Sewerage/wastewater treatment facility</td></tr></table> ***Editor's Note** - Proposals involving the above land uses must be referred to the Department of Defence (DoD) for assessment.*
Building Restricted Area	
PO4 Development does not interfere with the function of aviation facilities.	**AO4** Development is not located within: (1) 60m of the Non-Directional Beacon (NDB) antenna; or (2) 300m from the NDB antenna and the development will cross the zone boundary (zone boundary is defined as an elevation angle of 5 degrees from ground level at the centre of the NDB antenna).  **Figure 1 Non directional beacon (NDB)** ***Note** - Refer to **Figure 1 Non directional beacon (NDB)** for assistance in determining points (a) and (b) above. Any development in the area shown as Zone 'A' on **Figure 1 Non directional beacon (NDB)** does not meet the outcomes and will elevated to Code Assessment.*

Table 8.2.2.3.3— Airport Environs and Defence Land Overlay Code - for Assessable Development

Performance Outcomes	Acceptable Outcomes
Height Restriction Zone	
PO1 (1) Development located within the Building Restricted Area for an aviation facility does not create: (a) permanent or temporary physical obstructions in the line of sight between antennas; or (b) an electrical or electromagnetic field that will interfere with signals transmitted by	**AO1** No acceptable outcome is prescribed.

Performance Outcomes	Acceptable Outcomes
the facility; or (c) reflective surfaces that could deflect or interfere with signals transmitted by the facility. **OR** (2) Development located within the Building Restricted Area for an aviation facility is designed and constructed to mitigate adverse impacts on the function of the facility. ***Editor's Note*** *- The SPP State Interest Guideline - Strategic Airports and Aviation Facilities provides guidance on development requirements in Building Restricted Areas for aviation facilities.* ***Editor's Note*** *- A development proposal on land located within a Building Restricted Area must be referred to Airservices Australia or the Department of Defence (DoD) for assessment. Airservices Australia or DoD will provide local government and proponents with authoritative advice about the impact of a proposed development on the function of an aviation facility, requirements for a risk assessment process, and mitigation methods. It is recommended that advice be sought during pre-lodgement stage of development assessment processes to avoid objections from Airservices Australia or DoD.*	
Defence Land Buffer Area	
PO2 Development within the Defence Land Buffer identified on **Airport Environs and Defence Land Overlay Map OM-02** does not: (1) restrict the nature or scope of defence operations; or (2) increase the number of persons living or congregating in the Defence Land Buffer Area.	**PO3** Development within the Defence Land Buffer Area does not include any of the following: (1) *Animal keeping;* (2) *Child care centre;* (3) *Community care centre;* (4) *Community residence;* (5) *Community use;* (6) *Educational establishment;* (7) *Function facility;* (8) *Health care service;* (9) *Home based business (involving Bed and Breakfast);* (10) *Hospital;* (11) *Hotel;* (12) *Multiple dwellings;* (13) *Place of worship;* (14) *Relocatable home park;* (15) *Residential care facility;* (16) *Retirement facility;* (17) *Rooming accommodation;* (18) *Short-term accommodation;* (19) *Tourist park;* (20) *Veterinary service;* (21) Reconfiguring a lot that results the creation of additional lots.
PO4 Development located in the Defence Land Buffer Area is designed and sited to prevent unintended or	**AO4** No acceptable outcome is prescribed.

Performance Outcomes	Acceptable Outcomes
unauthorised access to defence land.	
PO5 Development is designed and sited to manage potential noise exposure from the Canungra Land Warfare Centre (identified as Defence Land on **Airport Environs and Defence Land Overlay Map OM-02**).	**AO5** No acceptable outcome is prescribed.

8.2.3 Bushfire Hazard Overlay Code

8.2.3.1 Application

This code applies to development:

(1) within the Bushfire Hazard Overlay as identified on the overlay maps contained in **Schedule 2 Mapping**; and

(2) identified as requiring assessment against the Bushfire Hazard Overlay Code by the tables of assessment in **Part 5 Tables of Assessment.**

Note - Land shown on the Bushfire Hazard Overlay Map OM-03 is designated as the Bushfire Prone Area for the purposes of section 12 of the Building Regulation 2006. The Bushfire Hazard Area includes land covered by the Medium, High and Very High Hazard Areas and Potential Bushfire Impact Buffer as identified in the SPP interactive mapping system (plan making) under the 'Safety and Resilience to Hazards' theme, subsection 'Natural Hazards Risks and Resilience'.

Note - The Building Act 1975 adopts the requirements of the Building Code of Australia and AS 3959-2009 and thus regulates construction standards of all building work identified in bushfire prone areas subsequent to development approval.

8.2.3.2 Purpose and Overall Outcomes

(1) The purpose of the Bushfire Hazard Overlay Code is to ensure that risk to life and property, and the impact on the environment, as a result of bushfire is avoided or mitigated, where development:

- (a) increases the number of people living and working in a bushfire hazard area;
- (b) involves premises visited or occupied by guests on a short term basis; or
- (c) involves uses where evacuating people may be difficult; or
- (d) involves the manufacture or storage of hazardous materials in bulk.

(2) The purpose of the code will be achieved through the following overall outcomes:

- (a) Development that potentially increases the exposure of people and property to natural hazards:
  - (i) avoids areas of bushfire risk; or
  - (ii) where areas of bushfire risk cannot be practicably avoided, development is designed, located and managed to ensure the risk to the safety of people and the damage to property is mitigated to an acceptable or tolerable level before, during and after a natural hazard event;
- (b) Development in areas at risk from bushfire hazard is compatible with the nature of the hazard;
- (c) Development is designed and operated in accordance with any Bushfire Management Plan prepared for the site;
- (d) Development avoids involving the establishment or intensification of vulnerable uses and community infrastructure within or near areas that are subject to bushfire hazard;

(e) Development does not result in a material increase in the extent or severity of bushfire hazard;

(f) Bushfire risk mitigation treatments are accommodated in a manner that avoids or minimises impacts on the natural environment and ecological processes, and conserves biodiversity values;

(g) Development involving the manufacture or storage of hazardous materials does not increase the risk to public safety or the environment in a bushfire event;

(h) Development contributes to, and does not unduly burden, effective and efficient disaster management response and recovery capabilities; and

(i) Development is located on landforms which can limit the intensity of a bushfire and that have other protective functions or community values.

8.2.3.3 Assessment Benchmarks

Note *- A bushfire hazard assessment may verify the extent of hazardous vegetation and extent and nature of the bushfire hazard area (bushfire prone area). Such assessments should be undertaken using the methodology set out in* ***Planning Scheme Policy 4 - Bushfire Management Plans****.*

In order to demonstrate compliance with the performance outcomes and/or acceptable outcomes, a bushfire management plan prepared by a suitably qualified person is required. Where acceptable outcomes are not met a risk assessment in accordance with AS/NZS 31000:2009 will be required to demonstrate the development achieves an acceptable or tolerable level of risk to life and property.

Table 8.2.3.3.1— Bushfire Hazard Overlay Code - For Accepted and Assessable Development

Performance Outcomes	Acceptable Outcomes
Access for Firefighting Appliances	
PO1 All premises are provided with vehicular access that enables safe evacuation for occupants and easy access by fire-fighting appliances. ***Note:*** *A site specific assessment prepared by a suitably qualified person in accordance with Planning Scheme Policy 4 - Bushfire Management Plans, may be required to determine compliance with PO1.*	**AO1.1** (1) Development has a driveway from a *constructed road* with:a minimum vertical clearance of 4.8 metres; and (2) a minimum formed width of 3.5 metres.
	AO1.2 (1) A driveway does not exceed a length of 60 metres from a *constructed road;* **OR** (2) Where a driveway from a *constructed road* is longer than 60 metres, it is designed to accommodate turning bays for firefighting appliance vehicles in accordance with Queensland Fire and Emergency Services, *Fire Hydrant and vehicle access guidelines for residential, commercial and industrial lots (2019)*.

Table 8.3.1.3.2— Bushfire Hazard Overlay Code - Assessable Development

Performance Outcomes	Acceptable Outcomes
All Development	
PO1 Development is located where it is not at risk from bushfire hazard. ***Note:*** *A site specific assessment prepared by a suitably qualified person in accordance with Planning Scheme Policy 4 - Bushfire Management Plans will be required to determine compliance with PO1.*	**AO1** A site specific assessment determines that bushfire hazard is unlikely on any part of the site affected by the development.
The following Outcomes (PO2 - PO22) must be addressed only where it is determined through AO1 above that the site is at risk from Bushfire Hazard and a Bushfire Management Plan is required	
PO2 Development complies with a site specific Bushfire Management Plan (BMP), prepared by a *suitably qualified person* in accordance with Planning Scheme Policy 4 - Bushfire Management Plans. The BMP demonstrates: (1) that the safety of people and property in a bushfire event can be managed and risks mitigated; and (2) how the specific outcomes of this Code can be achieved.	**AO2** No Acceptable Outcome is prescribed.
PO3 Development does not increase the number of people living, congregating or working on land in a *bushfire hazard area*, unless a Bushfire Management Plan (BMP), prepared by a *suitably qualified person* in accordance with **Planning Scheme Policy 4 - Bushfire Management Plans**, demonstrates that the safety of people and property in a bushfire event can be managed and risks mitigated.	**AO3.1** Development does not increase the number of people living, congregating or working on land in a *bushfire hazard area*. **AO3.2** Development involving a *vulnerable use* is not established in a *bushfire hazard area*.
PO4 *Emergency services* and uses providing community support services: (1) are able to function effectively and safely during and immediately after a bushfire hazard event; and (2) can demonstrate, by a Bushfire Management Plan prepared by a *suitably qualified person* in accordance with **Planning Scheme Policy 4 - Bushfire Management Plans**, that the safety of people and buildings in a bushfire event can be managed and lives protected during a bushfire event.	**AO4** *Emergency services* and uses providing community support services; (1) are not located in a *bushfire hazard area*; and (2) ensures the *development footprint*, including internal driveways between buildings and from buildings to the roadway, does not traverse a *bushfire hazard area*.
PO5 Development does not cause: (1) an adverse risk to people, property and the environment due to the impact of bushfire on hazardous materials; and (2) excess danger or difficulty for emergency services to provide an emergency response or evacuation.	**AO5** Development involving the storage, handling or manufacture of hazardous materials is not located within a *bushfire hazard area*.

Performance Outcomes	Acceptable Outcomes
PO6 Landscaping and fuel sources within the bushfire prone area between hazardous vegetation and building envelopes does not increase the potential for bushfire hazard.	**AO6** Landscaping treatments and fuel sources within a bushfire prone area, and any hazardous vegetation and building envelopes are designed and managed to achieve: (1) a potential available fuel load which is less than 5 tonnes/hectare in aggregate; and (2) a fuel structure which is discontinuous. ***Note** - A landscape maintenance plan may be required to identify the long-term management arrangements to be implemented to achieve the above Acceptable Outcome.*
PO7 Development is designed to minimise vegetation clearing and avoid or minimise impacts on the natural environment and ecological processes.	**AO7** Development is located in an area that does not require the removal of *native vegetation*.
PO8 Development outside reticulated water supply areas include a dedicated static supply that is available solely for fire-fighting purposes and can be accessed by fire-fighting appliances.	**AO8** A water tank is provided within 10 metres of each building (other than a class 10 building) which: (1) is either below ground level or of non-flammable construction; (2) has a take-off connection at a level that allows the following dedicated, static water supply to be left available for access by fire fighters: (a) 10,000 litres for residential buildings; (b) for industrial, commercial and other buildings, a volume specified in AS 2304–2011; (3) includes shielding of tanks and pumps in accordance with AS2304–2011; (4) includes a hardstand area (concrete or construction standard gravel) allowing medium rigid vehicle (15 tonne fire appliance) access within 6 metre of the tank; (5) is provided with rural fire brigade tank fittings if serviced by a rural fire brigade (i.e. 50 mm ball valve and male camlock coupling and, if underground, an access hole of 200mm (minimum) to accommodate suction lines); and (6) is clearly identified by directional signage at the street frontage.
PO9 Where development is undertaken in an urban area or is for urban purposes a constructed perimeter road with reticulated water supply is established between the lot or building envelope and is readily accessible at all times for urban fire fighting vehicles. The access to the perimeter road is available for both fire-fighting and maintenance works for hazard	**AO9.1** Lot boundaries or building envelopes are separated from hazardous vegetation by a public road which: (1) has a two-lane sealed carriageway clear of hazardous vegetation; (2) contains a reticulated water supply; (3) is connected to public roads at both ends and at intervals of no more than 500 m;

Performance Outcomes	Acceptable Outcomes
reduction purposes. ***Note -*** *For a material change of use perimeter roads are unlikely to be required where a development site involves less than 2.5ha and alternative access is available.*	(4) accommodates geometry, turning radii and vertical clearance in accordance with *Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines* and the Department of Transport and Main Roads' Planning and Design Manual; and (5) allows and does not impede access for fire-fighting and maintenance for fire-fighting purposes.
	AO9.2 Where a reticulated water supply is available, fire hydrants are designed, sited and installed in accordance with AS2419.1-2009 Fire Hydrant Installations - System Design, Installation and Commissioning, and connected to a reticulated water supply, unless otherwise specified by the relevant water entity.
PO10 Where development is undertaken for non-urban purposes either a constructed perimeter road or a formed, all weather fire trail is established between the development (including lots or building envelopes) and the hazardous vegetation, and is readily accessible at all times for the type of fire-fighting vehicles servicing the area. The access to the perimeter road or fire trail is available for both fire-fighting and maintenance works or hazard reduction activities. ***Note -*** *For a material change of use fire trails are unlikely to be required where a development site involves less than 2.5ha and alternative access is available.*	**AO10** Lot boundaries or building envelopes are separated from hazardous vegetation by a public road (as per AO19.1), or a fire trail which has: (1) a reserve or easement width of at least 20 metres (2) a minimum trafficable (cleared and formed) width of 4 metres and no less than 4.8 metres vertical clearance, with 3 metres each side cleared of all flammable vegetation greater than 10 centimetres in height (3) no cut or fill embankments or retaining walls adjacent to the 4 metres wide trafficable path (4) The trail must be capable of accommodating a 10 tonne vehicle (5) The balance 10 metre width of the easement has managed vegetation to remove major surface hazards (6) turning areas and vertical clearances for firefighting appliances in accordance with Queensland Fire and Emergency Services' Fire hydrant and vehicle access guidelines (7) a maximum gradient of 12.5 per cent (8) a cross-fall of no greater than 10 degrees (9) drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy (10) vehicular access at each end, which is connected to the public road network at intervals of no more than 500 metres (11) designated fire-trail signage (12) if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and (13) if a fire trail, has an access easement that is

Performance Outcomes	Acceptable Outcomes
	granted in favour of council and Queensland Fire and Emergency Services; and (14) allows and does not impede access for firefighting and maintenance for firefighting purposes.
PO11 Development is not located on slopes and land forms that expose people or property to an intolerable level of risk to life or property.	**AO11.1** Development along ridgelines saddles and crests where adjacent slopes exceed 14 degrees is avoided.
	AO11.2 Development is located where the effective slope is less than 5 degree downslope.
PO12 To ensure the protection of peoples' lives and property, an area designated for revegetation or rehabilitation will not create an additional bushfire prone area. ***Note -*** *If the acceptable outcomes are not met a bushfire hazard assessment in accordance with Planning Scheme Policy will need to be conducted to demonstrate areas designated for revegetation or rehabilitation will not create additional bushfire prone areas.*	**AO12.1** The dimensions and configuration of an area designated for revegetation or rehabilitation ensure the area does not have the ability to become a medium, high or very high bushfire prone area in the future. **OR** The landscaping treatments are designed to achieve; (1) potential available fuel load which is less than 5 tonnes/hectare in aggregate; and (2) fuel structure which is discontinuous.
	AO12.2 A landscape maintenance plan specifies long-term management arrangements necessary to ensure that: (1) potential available fuel load is maintained at less than 5 tonnes/hectare in aggregate; and (2) fuel structure remains discontinuous.
PO13 Where required, recreational parks or open space are located to act as a buffer between bushfire hazard areas and development and do not create additional bushfire hazard areas.	**AO13.1** Recreational parks or open space are designed and located between buildings, building envelopes or lot boundaries and adjacent bushfire hazard areas.
	AO13.2 Recreational parks or open space are designed to ensure that: (1) potential available fuel load is maintained at less than 5 tonnes/hectare in aggregate; and (2) fuel structure remains discontinuous.

Performance Outcomes	Acceptable Outcomes
PO14 Essential infrastructure is designed or located to minimise the creation of ignition sources that would increase the potential risk of bushfires to people and property.	**AO14** Major electricity infrastructure, Electricity distribution and transmission networks within the bushfire hazard area, are managed in accordance with *Electrical Safety Act 2002* and Regulation 2013.
Reconfiguring a Lot (PO15 - PO20)	
PO15 The safety of people and property are maintained by locating house site areas and other *vulnerable uses* on land or part of the land not affected or accessed by bushfire hazard.	**AO15.1** (1) Land that is subject to bushfire hazard is not subdivided for residential or rural residential purposes; or (2) Proposed lots are sited on land or part of the land that is determined as having low bushfire hazard by a Bushfire Management Plan prepared by a *suitably qualified person* in accordance with Planning Scheme Policy 4 - Bushfire Management Plans. *Note - Building envelopes or similar mechanisms will be used to control the future siting of buildings.*
	AO15.2 Additional lots are not created where the only vehicular access route is through a *bushfire hazard area*.
PO16 Development is located and designed to incorporate a bushfire defendable space which achieves separation between buildings and hazardous vegetation necessary to reduce risk to an acceptable or tolerable level.	**AO16.1** Lots or building envelopes are separated from hazardous vegetation by a distance that achieves a radiant heat flux level at any point on the building or envelope respectively of; (1) 10kW/m² where involving a vulnerable use; or (2) 29kW/m² otherwise. ***Note -*** *The radiant heat levels and separation distances are to be established in accordance with method 2 set out in AS3959-2009.*
	AO16.2 Building envelopes are provided that separate adjacent buildings or building envelopes by a distance of 8 metres. ***Note -*** *a) Where a separation distance is proposed to be achieved by utilising existing cleared developed areas external to the site, certainty must be established (through tenure or other means) that the land will remain cleared of hazardous vegetation.* *b) For staged developments, temporary separation distances, perimeter roads or fire trails may be absorbed as part of subsequent stages.*
PO17 Lots are designed so that their size and shape allow for efficient emergency access to buildings for firefighting appliances. ***Note -*** *Long driveways must accommodate turning areas for fire-fighting appliances in accordance with*	**AO17** Private driveways within individual lots: (1) a length no greater than 60 metres from the street to the dwelling; or (2) where exceeding a length of 60m, provide a turning bay with an 8m radius adjacent to

Performance Outcomes	Acceptable Outcomes
Queensland Fire and Emergency Services' Fire Hydrant and Access Guidelines.	the proposed location of any buildings; and (3) have a minimum formed width of 3.5m; and (4) have a minimum vertical clearance of 4.8m; and (5) serve no more than 3 dwellings or occupied buildings.
PO18 Development minimises the risk of damage to life and property from bushfires, by providing: (1) permanent access for fire-fighting vehicles; and (2) an adequate water supply for fire fighting purposes.	**AO18.1** Development involving the opening of a new road in a bushfire hazard area: (1) provides through roads; or (2) avoids cul-de-sac and dead end roads; and (3) ensures road design is capable of providing access for fire fighting and other emergency vehicles.
	AO18.2 Development: (1) where reticulated water supply is available, incorporates a reticulated water supply that provides a reliable water supply that has a minimum flow and pressure of 10 litres per second at 200 kPa; or (2) where outside reticulated water supply areas, provides an accessible water tank that is provided within 10m of each building (other than a class 10 building) that (a) is either below ground level or of non-flammable construction; (b) has a take-off connection at a level that allows the following dedicated, static water supply to be left available for access by fire fighters: (i) 10,000 litres for residential buildings; (ii) for industrial, commercial and other buildings, a volume specified in AS 2304–2011; (c) includes shielding of tanks and pumps in accordance with AS2304–2011; (d) includes a hardstand area (concrete or construction standard gravel) allowing medium rigid vehicle (15 tonne fire appliance) access within 6m of the tank; (e) is provided with rural fire brigade tank fittings if serviced by a rural fire brigade (i.e. 50 mm ball valve and male camlock coupling and, if underground, an access hole of 200mm (minimum) to accommodate suction lines); and (f) is clearly identified by directional signage at the street frontage.
	AO18.3 Where a reticulated water supply is available, fire hydrants are designed, sited and installed in accordance with *Queensland Fire and Emergency Services Fire Hydrant and*

Performance Outcomes	Acceptable Outcomes
	Vehicle Access Guidelines, unless other specified by the relevant water entity.
PO19 The development design: (1) minimises the area of development exposed to bushfire attack; and (2) establishes safe evacuation routes to achieve an acceptable or tolerable risk to people. ***Note -*** *For example, developments should avoid finger-like or hour-glass subdivision patterns or substantive vegetated corridors between lots.*	**AO19** The development: (1) minimises the length of the development perimeter exposed to, or adjoining hazardous vegetation; (2) avoids the creation of bottle-neck points in the movement network within the development; (3) establishes direct access to a safe assembly/evacuation area in the event of an approaching bushfire; (4) ensures roads internal and external to the development are designed to have sufficient capacity for the evacuating population, and minimise traffic congestion in the event of a bushfire; and (5) ensures access routes do not expose occupants to bushfire hazard. ***Note -*** *A safe assembly / evacuation area in (2) and sufficient capacity in (4) are to be determined by a bushfire hazard/risk assessment and/or bushfire protection plan.*
PO20 Emergency services and community infrastructure are able to function effectively and immediately after a bushfire event.	**AO20** Access and egress routes are: (1) public roads; (2) are designed to be used in all weather conditions; and (3) allow provision for safe passage of a fire appliance in accordance with *Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines.*

8.2.4 Environmental Significance Overlay Code

8.2.4.1 Application

This code applies to development:

(1) within the Environmental Significance Overlay as identified on the overlay maps contained in **Schedule 2 Mapping** which is summarised in **Table 8.2.4.1 Mapping Summary** below; and

(2) identified as requiring assessment against the Environmental Significance Overlay Code by the tables of assessment in **Part 5 Tables of Assessment**.

Editor's Note *- Applicants should also refer to other state and federal legislation which may require applicants to obtain additional approvals specifically where development impacts on a matter under the Environmental Protection and Biodiversity Conservation Act 1999 (Cth) or the Nature Conservation Act 1992.*

Table 8.2.4.1 Mapping Summary

Overlay Map	Mapped area
1. Environmental Significance Overlay Map – Biodiversity OM-04-A	**Matters of State Environmental Significance** • Protected Area • Regulated Vegetation (includes Regulated Vegetation intersecting a watercourse)
2. Environmental Significance Overlay Map – Local Biodiversity OM-04-B	**Matters of Local Environmental Significance** • Local Ecological
3. Environmental Significance Overlay Map – Priority Species OM-04-C	**Matters of State Environmental Significance** • State Significance Species
4. Environmental Significance Overlay Map – Wetlands and Waterways OM-04-D	**Matters of State Environmental Significance Waterways and Wetlands** • High Ecological Value Waters (Watercourse) • High Ecological Value Waters (Wetland) • High Ecological Significance Wetlands • Waterways and Wetlands Buffer Area
5. Environmental Significance Overlay Map – Local Watercourses OM-04-E	**Matters of Local Environmental Significance Local Watercourses** • Stream Order 2 • Stream Order 3 and 4 • Stream Order 5 to 7 • Watercourse Buffers Area A • Watercourse Buffers Area B • Watercourse Buffers Area C
6. Environmental Significance Overlay Map - Vegetation Management Area OM-04-F	**Matters of Local Environmental Significance** • Vegetation Management Area

8.2.4.2 Purpose and Overall Outcomes

(1) The purpose of the Environmental Significance Overlay Code is to ensure that:

(a) matters of environmental significance are protected and enhanced;

(b) biodiversity values including terrestrial and aquatic systems and ecological processes of the Scenic Rim are protected; and

(c) connectedness and condition of terrestrial and aquatic systems are enhanced providing habitat for the regions diversity of flora, fauna and ecological functions.

Editor's Note *- Council's Biodiversity Strategy should be consulted for further background on regional biodiversity matters.*

(2) The purpose of the code will be achieved through the following overall outcomes:

(a) Development protects and enhances matters of environmental significance to maintain flora and fauna diversity within:

(i) Protected Areas;

(ii) Regulated Vegetation (as defined in the SPP);

(iii) Local Ecological Corridor;

(b) Development protects and enhances:

(i) State Significant Species and locally significant species and their habitat; and

(ii) the water quality values and ecological function (including maintenance of fish passage) of wetlands, waterways and watercourses and their associated buffer areas;

(iii) biodiversity by providing linkages and expansion of areas of local and state biodiversity significance;

(iv) visual amenity and landscape character through retention of significant trees and reestablishment of vegetation in the Vegetation Management Area;

(c) Degraded matters of environmental significance are rehabilitated; and

(d) Buffers are provided to any Matters of State and Local Environmental Significance and any proposed impacts.

8.2.4.3 Assessment Benchmarks

Table 8.2.4.3.1— Environmental Significance Overlay Code - for Assessable Development

Performance Outcomes	Acceptable Outcomes
Protection of Matters of State and Local Environmental Significance identified on: (1) **Environmental Significance Overlay Map – Biodiversity OM-04-A; or** (2) **Environmental Significance Overlay Map – Local Biodiversity OM-04-B** (3) **Environmental Significance Overlay Map – Priority Species OM-04-C; or** (4) **Environmental Significance Overlay Map – Wetlands and Waterways OM-04-D; or** (5) **Environmental Significance Overlay Map – Local Watercourses OM-04-E**	
PO1 Development protects and avoids impact on Matters of State and/or Local Environmental Significance. ***Note*** *- Compliance with this Performance Outcome must be demonstrated by an Ecological Assessment Report prepared in accordance with* ***Planning Scheme Policy 5 - Ecological Assessments****.*	**AO1.1** Development has no impact on the relevant environmental values of Matters of State and/or Local Environmental Significance. OR **AO1.2** An Ecological Assessment Report prepared in accordance with **Planning Scheme Policy 5 - Ecological Assessments** demonstrates that the development site does not contain any Matters of State and/or Local Environmental Significance. OR **AO1.3**

Performance Outcomes	Acceptable Outcomes
	An Ecological Assessment Report prepared in accordance with **Planning Scheme Policy 5 - Ecological Assessments** demonstrates that development is located, designed and operated to mitigate adverse impacts on the relevant environmental values of Matters of State and/or Local Environmental Significance.
PO2 Development is designed and constructed to: (1) avoid significant adverse impact on Matters of State and/or Local Environmental Significance; and (2) protect and enhance *ecological connectivity* and habitat extent between areas of State and/or Local Environmental Significance.	**AO2** The design and layout of development minimises adverse impacts on Matters of State and/or Local Environmental Significance by: (1) focusing development in non-vegetated areas to protect existing habitat; (2) using urban design to consolidate density and preserve existing habitat and *native vegetation*; (3) aligning property boundaries to maintain ecologically important areas; (4) ensuring that alterations to natural landforms, hydrology and drainage patterns on the development site do not negatively affect ecologically important areas; (5) avoiding impacts on flora and fauna and their habitat as identified in the Nature Conservation Act 1992 and locally significant species; (6) ensuring that significant fauna and flora and their habitats are protected in their environmental context and incorporate measures that allow for the safe movement of fauna through the site; (7) ensuring the clearing of *native vegetation* is minimised; (8) ensuring development does not isolate areas identified as Matters of State and/or Local Environmental Significance; (9) ensuring development retains *native vegetation* in areas large enough to maintain ecological values, functions and processes; and (10) ensuring development is operated and managed in a manner to ensure long term viability of the matter of environmental significance. ***Note** - Development should ensure that the ecological connectivity between habitats (whether it is the same or different environmental value) is not affected to the extent that migration or normal movement of significant species between habitats or normal gene flow between populations is inhibited. Maintaining vegetation in patches of the greatest possible size and with the minimal edge-to-area ratio, for example, can help to achieve this.*
PO3 Buffers are provided and maintained that protect the long term viability of Matters of State and/or Local Environmental Significance. ***Note** - Compliance with this Performance Outcome must be demonstrated by an Ecological Assessment Report prepared in accordance with **Planning Scheme Policy 5 - Ecological Assessments**.*	**AO3.1** Development provides and maintains a buffer to Matters of State and/or Local Environmental Significance, the width of which is supported by an evaluation of the *environmental values* prepared in accordance with **Planning Scheme Policy 5 - Ecological Assessments.** **OR**

Performance Outcomes	Acceptable Outcomes
	AO3.2 Where involving a wetland or watercourse, development provides a buffer from an area identified as High Ecological Value Waters (Watercourse), High Ecological Value Waters (Wetland) and High Ecological Significance Wetlands which has a minimum width of: (1) 100m where the area is located outside an urban area; or (2) 50m where the area is located within an urban area. ***Note** - Use the Queensland Wetlands Buffer Guideline http://wetlandinfo.ehp.qld.gov.au/resources/static/pdf/resources/reports/buffer-guide/wetland-buffer-guideline-14-04-13.pdf and/or the setback buffer distances for wetlands and watercourses http://dilgp.qld.gov.au/resources/policy/sdap/sdap-module-8-v-1-7.pdf under the native vegetation clearing (Module 8) of the State Development Assessment Provisions for guidance on buffers.*
PO4 The ongoing management, operation and tenure of Matters of State and/or Local Environmental Significance, ensures impacts on biodiversity values and ecological processes are avoided or minimised.	**AO4.1** No ongoing impacts occur from the operation of the development. **OR** **AO4.2** Where impacts are ongoing: (1) they are mitigated by appropriate management, tenure or monitoring and reporting; and (2) relevant management plans and reporting are provided for assessment and approval. ***Note** - Appropriate management arrangements could include conservation tenures such as conservation covenants, conservation envelopes, nature refuges, protected areas or parks.*
PO5 Disturbed or cleared or degraded areas are rehabilitated.	**AO5** Development provides for cleared, degraded or disturbed areas to be rehabilitated or allowed to regenerate naturally, where development is located in areas identified as: (1) Protected Areas; (2) Regulated Vegetation (as defined in the SPP); (3) mapped areas of Local Environmental Significance; or (4) other Matters of State and/or Local Environmental Significance identified within an Ecological Assessment Report as requiring rehabilitation.
	PO5.2 Development provides for *locally significant species* to be predominantly used in revegetation and landscape planting on the site.
PO6 Where *habitat* or *vegetation* is proposed to be damaged, management strategies are implemented to ensure the protection and safety of wildlife and the protection of nearby *habitat* in	**AO6** Development ensures that: (1) the native fauna is safely relocated to an area of similar *habitat*; (2) the sequence of *habitat* disturbance ensures that

Performance Outcomes	Acceptable Outcomes
areas identified as either Matters of State and/or Local Environmental Significance.	fauna is not isolated from adjoining areas of *habitat*; (3) fauna relocation occurs immediately prior to *habitat* disturbance; (4) qualified fauna spotter catchers, licenced by the Queensland Parks and Wildlife Service, are present on the site at the time of the damage, to direct and undertake the removal and relocation of fauna; (5) where possible, damaged *habitat* and nesting sites are rehabilitated outside of development areas; (6) *vegetation* planned for retention is protected from damage, in accordance with AS4970. (7) *vegetation* is cleared in accordance with *Policy 6 of the Department of Environment and Heritage Protection's: Koala-Sensitive Design Guideline*.
PO7 Development design and location provides for the safe movement of native fauna through the site.	**AO7** Where infrastructure crosses native fauna movement paths, the design of new development incorporates fauna friendly movement solutions. ***Editor's note*** *- Fauna friendly movement solutions developed in accordance with the Queensland Government Fauna Sensitive Road Design Manual Volume2: Preferred Practices; and the Department of Environment and Heritage Protection's: Koala-Sensitive Design Guideline are Council's preferred method for addressing this outcome.*
Local Vegetation Clearing - Offsets	
PO8 Where significant residual impacts resulting from damage to *vegetation* in areas identified as Matters of Local Environmental Significance (and where not identified as Matters of State Environmental Significance) cannot be avoided or mitigated, the impacts are offset so that the *environmental value* proposed to be removed from the site is maintained. ***Note*** *- Compliance with this performance outcome is to be demonstrated by an Ecological Assessment Report.*	**AO8** No Acceptable Outcome is prescribed.
Water Quality - Waterways and Wetlands	
PO9 Development located in areas identified on **Environmental Significance Overlay Map - Wetlands and Waterways OM-04-D**: (1) protects or enhances habitat values (including maintenance of fish passage), ecological connectivity and other ecological functions and values; (2) protects water quality and aquatic conditions; (3) maintains natural micro-climatic conditions; (4) maintains natural hydrological processes; (5) prevents mass soil movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion, or scalding; and (6) avoids loss or modification of chemical, physical or biological properties or functions of soil.	**AO9.1** Development, including any associated filling or excavation (other than rehabilitation or restorative works) does not occur within a High Ecological Value Waters (Watercourse), High Ecological Value Waters (Wetland), High Ecological Significance Wetlands and Waterways and Wetlands Buffer Area. **PO9.2** Development provides a buffer from an areas identified as High Ecological Value Waters (Watercourse), High Ecological Value Waters (Wetland), and High Ecological Significance Wetlands which has a minimum width of: (1) 100m where the area is located outside an *urban area*; or (2) 50m where the area is located within an *urban area*; or (3) the buffer width of which is supported by an

Performance Outcomes	Acceptable Outcomes
	evaluation of the *environmental values* (identified by a *suitably qualified person*), including the function and threats. ***Note*** *- Use the Queensland Wetlands Buffer Guideline http://wetlandinfo.ehp.qld.gov.au/resources/static/pdf/resources/reports/buffer-guide/wetland-buffer-guideline-14-04-13.pdf and/or the setback buffer distances for wetlands and watercourses http://dilgp.qld.gov.au/resources/policy/sdap/sdap-module-8-v-1-7.pdf under the native vegetation clearing (Module 8) of the State Development Assessment Provisions for guidance on buffers.* ***Editor's Note*** *- Buffer Areas to Matters of State Environmental Significance Waterways and Wetlands have been mapped based on 100m either side of the centre line of the receiving waters or 100m from wetlands.*
PO10 Development within a Watercourse Buffer Area (A, B or C) shown on **Environmental Significance Overlay Map - Local Watercourse OM-04-E** has no adverse impact on: (1) *native vegetation*; (2) terrestrial and aquatic habitat; (3) ecological functions; and (4) nature conservation functions.	**AO10** The *development footprint* is not located within: (1) 10m from the high or outer bank of the watercourse located in Watercourse Buffer Area A; (2) 25m from the high or outer bank of the watercourse located in Watercourse Buffer Area B; (3) 50m from the high or outer bank of the watercourse located in Watercourse Buffer Area C.
Water Quality - All Waterways and Wetlands and Local Watercourses	
PO11 Development appropriately manages stormwater quality to: (1) protect natural ecosystems; (2) protect water quality; (3) reduce runoff and peak flows; and (4) meet the water quality objectives and environmental values for Queensland waters. ***Note*** *- Development is designed to achieve the prescribed water quality objectives for Waterways in accordance with the Environmental Protection (Water) Policy 2009 for both State and Local wetlands, waterways, and watercourses.*	**AO11** A site-based stormwater quality management plan (SQMP) is prepared by a *suitably qualified person* that demonstrates that the stormwater quality treatment measures meet the design objectives identified in **Table 8.2.4.3.2 - Stormwater Management Design Objectives**.
PO12 Stormwater quantity management outcomes demonstrate no adverse impact on stormwater flooding or the drainage of properties external to the subject site.	**AO12.1** A site-based stormwater quantity management plan (SQMP) is prepared by a *suitably qualified person*: (1) that demonstrates achievable stormwater quantity control measures for discharge during both the construction and operational phases of development; and (2) is designed in accordance with the *Queensland Urban Drainage Manual (QUDM).*
	AO12.2 Stormwater flows discharged from development are either within the capacity of the downstream drainage system such that non-worsening occurs, or are mitigated to pre-development characteristics.

Performance Outcomes	Acceptable Outcomes
PO13 Development does not discharge wastewater to a waterway or wetland off-site unless demonstrated to be best practice environmental management for that site and addresses the: (1) applicable water quality objectives for the receiving waters; and (2) the potential adverse impact on ecosystem health of receiving waters. **Note** - Development is designed to achieve the prescribed water quality objectives for Waterways in accordance with the Environmental Protection (Water) Policy 2009 for both State and Local wetlands, waterways, and watercourses.	**AO13.1** Where the development involves the discharge of wastewater, a site-based Wastewater Management Plan is prepared by a *suitably qualified person* and addresses: (1) wastewater type; (2) climatic conditions; (3) water quality design objectives; and (4) best-practice environmental management. **AO13.2** The site-based Wastewater Management Plan required in **AO13.1** provides that wastewater is managed in accordance with a waste management hierarchy that: (1) avoids wastewater discharges to waterways, wetlands and watercourses; and (2) if wastewater discharge to waterways, wetlands or watercourses cannot practicably be avoided, minimises wastewater discharge to waterways, wetlands or watercourses by re-use, recycling, recovery and treatment for disposal to sewer, surface water and groundwater.
PO14 The *environmental value* of receiving waters and the functionality of stormwater infrastructure are protected from the impacts of erosion, turbidity and sedimentation. ***Note** - Development is designed to achieve the prescribed water quality objectives for Waterways in accordance with the Environmental Protection (Water) Policy 2009 for both State and Local wetlands, waterways, and watercourses.*	**AO14** An erosion and sediment control plan is prepared by a *suitably qualified person* that achieves the design objectives in **Table 8.2.4.3.2 - Stormwater Management Design Objectives**.
PO15 Development does not cause land degradation in areas identified as Matters of State Environmental Significance Waterways and Wetlands (identified on **Environmental Significance Overlay Map - Wetlands and Waterways OM-04-D**) or Matters of Local Environmental Significance Local Watercourses (identified on **Environmental Significance Overlay Map - Local Watercourses OM-04-E**), including: (1) mass soil movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion, or scalding; and (2) loss or modification of chemical, physical or biological properties or functions of soil.	**PO15** Development does not change the natural surface water or groundwater hydrologic regime, including through channelization, redirection or interruption of flow, where located in areas identified as: (1) Matters of State Environmental Significance Waterways and Wetlands (identified on **Environmental Significance Overlay Map - Wetlands and Waterways OM-04-D**); or (2) Matters of Local Environmental Significance Local Watercourses (identified on **Environmental Significance Overlay Map - Local Watercourses OM-04-E**).
Reconfiguring a Lot	
PO16 Where the site is identified as having Matters of State and/or Local Environmental Significance the ecological function and biodiversity values of existing habitat are maintained by ensuring that reconfiguring a lot does not result in the:	**AO16.1** Where required, areas that are mapped as containing Matters of State and/or Local Environmental Significance are dedicated as public open space for purposes consistent with the ecological values and functions of the area.

Performance Outcomes	Acceptable Outcomes
(1) fragmentation of habitat; (2) loss of habitat; and (3) loss of *environmental values*.	
	AO16.2 The design, location and shape of the development does not impact on Matters of State and/or Local Environmental Significance by: (1) ensuring the boundaries do not result in the clearing of Matters of State and/or Local Environmental Significance. (2) the shape size and location of lots and there boundaries minimise the impact of Matters of State and/or Local Environmental Significance. (3) dedicated Matters of State and/or Local Environmental Significance as conservation area in a private property conservation mechanism.
	AO16.3 Where required, open space is provided adjacent to waterway buffers with roads servicing linear parkland and lots located on the opposite side of the road.
	AO16.4 Where required, open space for conservation purposes is consolidated with existing conservation areas to allow for a connected movement corridor.
Development in a Vegetation Management Area on Environmental Significance Overlay Map - Vegetation Management Area OM-04-F	
PO17 Development in the Vegetation Management Area maximises the retention of significant trees to maintain and protect the visual amenity of the local area.	**AO17** Development is located in an existing cleared area.
PO18 Development in the Vegetation Management Area maintains and enhances a predominantly forested character when viewed from a road.	**AO18** No Acceptable Outcome is prescribed.
PO19 Development in the Vegetation Management Area protects and enhances significant trees on ridgelines which contributes to the character and visual amenity of the local area.	**AO19** No Acceptable Outcome is prescribed.
PO20 Development in the Vegetation Management Area avoids or minimises disturbance to significant trees on steep slopes to prevent erosion and slippage.	**AO20** No Acceptable Outcome is prescribed.
PO21 Development in the Vegetation Management Area protects and enhances a significant tree which - (1) is of significant historical, cultural, educational and aesthetic value; or (2) is an uncommon species in the locality; or (3) positively contributes to the character and	**AO21** No Acceptable Outcome is prescribed.

Performance Outcomes	Acceptable Outcomes
visual amenity of the local area; or (4) is of a great height, trunk circumference or canopy spread; or (5) contains a hollow or is a nesting tree for native fauna.	
PO22 Development in the Vegetation Management Area contributes towards the maintenance of biodiversity by providing for the linking of and expansion of areas of local and state biodiversity significance.	**AO22** Development retains and replants vegetation that - (1) links areas of forest; (2) provides for the expansion of area of forest; (3) where location would support areas of state biodiversity significance, provides for the reestablishment of forest; and (4) provides for such areas to be included in a conservation envelope or retained in public ownership.

Table 8.2.4.3.2 - Stormwater Management Design Objectives

Issue		Design objectives
Drainage control	Temporary drainage works	(1) Design life and design storm for temporary drainage works: (a) Disturbed area open for <12 months—1 in 2-year ARI event (b) Disturbed area open for 12–24 months—1 in 5-year ARI event (c) Disturbed area open for > 24 months—1 in 10-year ARI event (2) Design capacity excludes minimum 150 mm freeboard (3) Temporary culvert crossing—minimum 1 in 1-year ARI hydraulic capacity
Erosion control	Erosion control measures	(1) Minimise exposure of disturbed soils at any time (2) Divert water run-off from undisturbed areas around disturbed areas (3) Determine the erosion risk rating using local rainfall erosivity, rainfall depth, soil-loss rate or other acceptable methods (4) Implement erosion control methods corresponding to identified erosion risk rating
Sediment control	(1) Sediment control measures (2) Design storm for sediment control basins (3) Sediment basin dewatering	(1) Determine appropriate sediment control measures using: (a) potential soil loss rate, or (b) monthly erosivity, or (c) average monthly rainfall (2) Collect and drain stormwater from disturbed soils to sediment basin for design storm event: (a) design storm for sediment basin sizing is 80th% five-day event or similar (3) Site discharge during sediment basin dewatering: (a) TSS < 50 mg/L TSS, and (b) Turbidity not >10% receiving waters turbidity, and (c) pH 6.5–8.5
Water quality	Litter and other waste, hydrocarbons and other contaminants	(1) Avoid wind-blown litter; remove gross pollutants (2) Ensure there is no visible oil or grease sheen on released waters (3) Dispose of waste containing contaminants at authorised facilities
Waterway stability and flood flow management	Changes to the natural waterway hydraulics and hydrology	(1) For peak flow for the 1-year and 100-year ARI event, use constructed sediment basins to attenuate the discharge rate of stormwater from the site

8.2.5 Extractive Resources Overlay Code

8.2.5.1 Application

This code applies to development:

(1) within the Extractive Resources Overlay as identified on the overlay maps contained in **Schedule 2 Mapping**; and

(2) identified as requiring assessment against the Extractive Resources Overlay Code by the tables of assessment in **Part 5 Tables of Assessment.**

8.2.5.2 Purpose and Overall Outcomes

(1) The purpose of the Extractive Resources Overlay Code is to protect extractive resources within a Key Resource Area (KRA) from development that might prevent or constrain current or future extraction of the resource.

(2) The purpose of the code will be achieved through the following overall outcomes:

(a) Development ensures that Resource Area/Processing Areas, Separation Areas, Transport Routes and Transport Route Separation Areas are protected from encroaching development that is not compatible with the Extractive industry use;

(b) Development does not compromise the operation of an existing or future Extractive industry use identified in **Extractive Resources Overlay Map OM-05**;

(c) Development for a *sensitive land use* or incompatible use maintains an effective separation from a Resource Area/Processing Area and does not encroach within a Separation Area or a Transport Route Separation Area; and

(d) Development, other than for an Extractive industry, is buffered from and is able to mitigate impacts likely to occur as a result of the extraction of resources from a Key Resource Area.

Editor's Note** - Key Resource Areas includes Resource Area / Processing Area, Separation Area, Transport Route and Transport Route Separation Area as identified on the Ex**tractive Resources Overlay Map OM-05

***Editor's Note** - The KRA's (as at 1 July 2017) within the Scenic Rim Region are listed in the below table:*

KRA Number	*Key Resource Area Name*
KRA 61	*Bromelton*
KRA 95	*Mundoolun Connections Sands*
KRA 139	*Cryna*
KRA 140	*Erin View*
KRA 141	*Kangaroo Mountain*
KRA 142	*Markwell Creek*
KRA 143	*Yore Road*
KRA 158	*Mount Walker*

8.2.5.3 Assessment Benchmarks

Table 8.2.5.3.1— Extractive Resources Overlay Code - Assessable Development

Performance outcomes	Acceptable outcomes
Protection of Key Resource Areas	
PO1 Development in a Key Resource Area (KRA) maintains the long-term availability and ability to extract the extractive resource.	**AO1.1** Development not associated with extractive industry in the KRA does not involve a *sensitive land use* and does not increase the number of people living in the KRA.
	AO1.2 Development involving reconfiguring a lot does not result in an increase in the number of lots within the KRA located in a: (1) Resource Area / Processing Area; or (2) Separation Area; or (3) Transport Route Separation Area.
Protection of Transport Routes	
PO2 Development will not adversely affect the safe and efficient operation of vehicles transporting extractive materials along the Transport Route identified in the **Extractive Resources Overlay Map OM-05**.	**AO2** Development: (1) does not increase the number of access points to the Transport Route; or (2) access points are designed to ensure the safe and efficient operation of vehicles transporting extractive materials along the transport route.
Development Intensity	
PO3 Development incorporates measures to mitigate the potential adverse effects from existing or future extractive industry on people working, residing or congregating in the Resource Area / Processing Area, Separation Area and Transport Route Separation Area.	**AO3.1** The number of people working, residing or congregating in the Resource Area / Processing Area, Separation Area and Transport Route Separation Area is not increased.
	AO3.2 Development incorporates design, orientation and construction materials that mitigate the potential adverse effects from an existing or future extractive industry to acceptable levels by: (1) locating buildings and structures the greatest distance practicable from the Resource Area / Processing Area and associated Transport Route; (2) designing buildings so the areas where people live, work and congregate (habitable rooms) are furthermost from the Resource Area / Processing Area and associated Transport Route; (3) minimising openings in walls closest to these effects; (4) providing mechanical ventilation to habitable rooms; (5) use of appropriate construction methods and materials including (acoustic) insulation and glazing materials; (6) providing private outdoor recreation space that is located adjacent to a building façade which shields it from the extractive industry or resource; and

Performance outcomes	Acceptable outcomes
	(7) providing buffer landscaping between development and the Resource Area / Processing Area, where the Resource Area / Processing Area is visible from the development.

8.2.6 Flood Hazard Overlay Code

8.2.6.1 Application

This code applies to development:

(1) within the Flood Hazard Overlay as identified on the overlay maps contained in **Schedule 2 Mapping**; and

(2) identified as requiring assessment against the Flood Hazard Overlay Code by the tables of assessment in **Part 5 Tables of Assessment**.

8.2.6.2 Purpose

(1) The purpose of the Flood Hazard Overlay Code is to ensure that development in a flood hazard area is compatible with the risk of the flood hazard and protects life and property.

(2) The purpose of the code will be achieved through the following overall outcomes:

(a) Development that potentially increases the exposure of people and property to flood hazards:

(i) avoids areas of significant flood hazard risk; or

(ii) where areas of flood hazard risk cannot be practicably avoided, development is designed, located and managed to ensure the risk to people and property is mitigated to an acceptable or tolerable level, during and after a flood event;

(b) The development siting, layout, and access responds to the risk of the flood hazard, including flood hazard category, and minimises risk to personal safety;

(c) The development is resilient to flood events by ensuring siting, design and materials stored on site accounts for the potential risks of flood hazards;

(d) The development supports, and does not unduly burden disaster management response or recovery capacity and capabilities;

(e) The development directly, indirectly and cumulatively does not materially increase the severity of the flood hazard and does not significantly increase the potential for damage on the site or to other properties;

(f) The development avoids the release of hazardous materials as a result of a flood event;

(g) Natural processes and the protective function of landforms and/or vegetation are maintained in *flood hazard areas*;

(h) Development in flood hazard areas supports and does not hinder disaster management capacity and capabilities;

(i) Community infrastructure is located and designed to maintain the required level of functionality during and immediately after a flood event.

***Editor's Note** - For this overlay, where land is located in the Investigation Area of the **Flood Hazard Overlay Map - Hazard Area OM-06-A**, a defined flood level based on the 1% AEP flood event is not available. A flood investigation undertaken by a suitably qualified person is required to determine the defined flood level.*

8.2.6.3 Assessment Benchmarks

Table 8.2.6.3.1 — Flood Hazard Overlay Code - for Assessable Development

Performance Outcomes	Acceptable Outcomes
PO1 Development siting, layout and access: (1) responds to the potential risk of flooding, including the *Flood Hazard Category* on the site; (2) maintains personal safety at all times; and (3) mitigates the risk to people and property to an acceptable or tolerable level. ***Note*** *- Flood Hazard Category is shown on the Flood Hazard Overlay Map - Category Area OM-06-B.*	**AO1.1** A new building or extension to an existing building is not located in a high hazard category area as shown on the **Flood Hazard Overlay Map - Category Area OM-06-B.**
	AO1.2 Residential buildings: (1) are not located on land in a *flood hazard area*; or (2) where the development cannot be located on land outside the *flood hazard area*, all floor levels of habitable rooms are elevated a minimum of 500mm above the *defined flood level*. Non-residential buildings: (1) are not located on land in a *flood hazard area;* or (2) where development cannot be located on land outside the *flood hazard area,* all floor levels are elevated a minimum of 500mm above the *defined flood level.* ***Note*** *- If part of the site is outside the flood hazard area, this is the preferred location for development.* ***Note*** *- Building work in a designated flood hazard area must meet the requirements of the relevant building assessment provisions under the Building Act 1975.* ***Editor's Note*** *- The defined flood level may be obtained from a Council property flood search where the property is located within the Defined Flood Area on* ***Flood Hazard Overlay Map - Hazard Area OM-06-A****. A site based flood study is required that investigates the impact of the development on the floodplain and demonstrates compliance with the Performance Outcome where a flood level is not available (Investigation Area).*
	AO1.3 Development provides for a road and/or pathway layout that ensures residents are not physically isolated by the *defined flood event* and provides a safe and clear evacuation route by: (1) locating entry points into the development are located outside the *flood hazard area*; (2) ensuring all roads in the development are located outside the *flood hazard area*; (3) avoiding cul-de-sacs or other non-permeable layouts; and (4) providing direct and simple routes to main carriageways.
	AO1.4 Development ensures that all buildings have vehicle and pedestrian evacuation routes outside the *flood hazard area* to facilitate egress from the site.
	AO1.5

Performance Outcomes	Acceptable Outcomes
	Development either: (1) does not create additional lots that are located in the *flood hazard area*; or (2) creates lots that incorporate a building envelope outside the *flood hazard area*. ***Editor's note*** *- If part of the site is outside the Flood Hazard Area, this is the preferred location for all lots (excluding park or other relevant open space and recreation lots).* ***Editor's Note*** *- Buildings subsequently developed on the lots created will need to comply with the relevant building assessment provisions under the Building Act 1975.*
	AO1.6 There is no intensification of residential uses within flood affected areas on land situated below the *defined flood event*. ***Editor's note*** *- If part of the site is outside the Flood Hazard Area, this is the preferred location for all buildings.*
	AO1.7 Development ensures that: (1) signage is provided on a road or pathway indicating the position and path of all safe evacuation routes off the premises; and (2) where the site contains or is within 100m of a floodable waterway, hazard warning signage and depth indicators are provided at key hazard points, such as at floodway crossings or entrances to low-lying reserves.
	AO1.8 Development is located to support self-evacuation of people, and ensure sufficient warning time for the nature of the use.
	AO1.9 Development does not: (1) shorten warning time for other uses in the floodplain; and (2) impact on the ability of traffic to use evacuation routes, or unreasonably increase traffic volumes on evacuation routes.
	AO1.10 Development in greenfield areas protects a *floodway* by providing an easement or reserve over the area of the premises up to the *defined flood event.*
	AO.11 Development allows an area within the development site at or above the flood planning level with sufficient space to accommodate the likely population of the development in safety for a relatively short time until flash flooding subsides (if applicable) or people can be evacuated.

Performance Outcomes	Acceptable Outcomes
PO2 Development is compatible with the level of risk associated with the flood hazard such that: (1) *Vulnerable uses* in the high hazard *Flood Hazard Category* are avoided; (2) *Vulnerable uses* in the medium or low hazard *Flood Hazard Category* area mitigates the risk to an acceptable or tolerable level. ***Note** - Flood Hazard Category is shown on the Flood Hazard Overlay Map - Category Area OM-06-B.*	**AO2** Development in high hazard areas is limited to non-*Vulnerable uses.*
PO3 Development is resilient to flood events and supports disaster management response or recovery capacity and capabilities by ensuring design, built form and materials stored on site do not increase the potential for damage on the site or to other properties.	**AO3.1** Materials stored on site: (1) are readily able to be moved in a flood event to a flood free area; and (2) where capable of creating a safety hazard by being shifted by floodwaters, are contained in order to minimise movement in times of flood. ***Note** - Businesses and Animal Husbandry or Cropping uses should ensure that they have the necessary continuity plans in place to account for the potential need to relocate property prior to a flood event (e.g. allow enough time to transfer stock to the upstairs level of a building, an area not affected by flood, or off site).* ***Note** - Queensland Government Fact Sheet 'Repairing your house after a flood' provides information about water resilient products and building techniques.*
	AO3.2 Non-residential buildings and structures allow for flow through of flood waters on the ground floor. ***Editor's Note** - The relevant building assessment provisions under the Building Act 1975 apply to all building work within the Flood Hazard Area and need to take account of the flood potential within the area.*
PO4 Development avoids the release of hazardous materials into floodwaters.	**AO4** Development: (1) involving materials manufactured or stored on site are not hazardous or noxious, or comprise materials that may cause a detrimental effect on the environment if discharged in a flood event; or (2) involving the manufacture or storage of hazardous materials ensures structures are: (a) located above the defined flood level; or (b) designed to prevent the intrusion of floodwaters; or (3) where a defined flood level is not available, ensures hazardous materials and their manufacturing equipment are: (a) located on the highest part of the site to enhance flood immunity; and (b) designed to prevent the intrusion of

Performance Outcomes	Acceptable Outcomes
	floodwaters. ***Editor's Note*** *- Refer to the Work Health and Safety Act 2011 and associated Regulation and Guidelines, the Environmental Protection Act 1994 and the relevant building assessment provisions under the Building Act 1975 for requirements related to the manufacture and storage of hazardous substances.*
PO5 Development supports, and does not burden, disaster management response or recovery capacity and capabilities.	**AO5** Development does not: (1) increase the number of people calculated to be at risk from flooding; or (2) increase the number of people likely to need evacuation; or (3) shorten flood warning times; or (4) impact on the ability of traffic to use evacuation routes, or unreasonably increase traffic volumes on evacuation routes.
PO6 Development involving community facilities or infrastructure: (1) remains functional to serve community need during and immediately after a flood event; (2) is designed, sited and operated to avoid adverse impacts on the community or the environment due to the impacts of flooding on infrastructure, facilities or access and egress routes; (3) retains essential site access during a flood event; and (4) is able to remain functional even when other infrastructure or services may be compromised in a flood event.	**AO6.1** Any components of infrastructure that are likely to fail to function or may result in contamination when inundated by flood, such as electrical switch gear and motors, telecommunications connections, or water supply pipeline air valves, are: (1) located above the *defined flood level*; and (2) designed and constructed to exclude floodwater infiltration.
	AO6.2 Infrastructure is designed and constructed to resist hydrostatic and hydrodynamic forces as a result of inundation by flood.
	AO6.3 In new subdivisions and large master planned developments, arterial, sub-arterial or major collector roads are located above a suitable flood immunity level.
PO7 Development involving community facilities or infrastructure: (1) remains functional to serve community need during and immediately after a flood event; (2) is designed, sited and operated to avoid adverse impacts on the community or the environment due to the impacts of flooding on infrastructure, facilities or access and egress routes; (3) retains essential site access during a flood event; and (4) is able to remain functional even when other infrastructure or services may be compromised in a flood event.	**AO7.1** Development for community services activities or infrastructure is designed to have a minimum flood immunity as prescribed in **Table 8.2.6.3.2.**
	AO7.2 For all other development being an *infrastructure activity* not listed in **Table 8.2.6.3.2**, such development can function effectively during and immediately after flood events.
	AO7.3 For all other development being a *community services activity* not listed in **Table 8.2.6.3.2**, such development is not located on land inundated during a *defined flood event*.
	AO7.3 The following uses have direct access to low hazard evacuation routes as defined in **Table 8.2.6.3.3 Low Hazard Evacuation Routes**: (1) *Community residence;*

Performance Outcomes	Acceptable Outcomes
	(2) *Emergency services;* (3) *Hospitals;* (4) *Residential care facility;* (5) *Retirement facility;* (6) *Child care centre;* (7) *Substation;* (8) *Utility installations;* (9) *Community use;* (10) *Community care centre;* (11) *Detention facility;* (12) *Educational establishment;* (13) *Tourist park;* (14) *Non-resident workforce accommodation;* (15) *Rooming accommodation;* (16) *Rural workers' accommodation; and* (17) *Relocatable home park.*
PO8 Development directly, indirectly and cumulatively avoids any increase in water flow, velocity or flood level and does not increase the potential for damage on site or on other properties.	**PO8.1** In non-urban areas, buildings, infrastructure and building envelopes are set back a minimum of 50 metres from Stream Order 3 and 4, and Stream Order 5 to 7 on the **Environmental Significance Overlay Map - Local Watercourses OM-04-E** to maintain the natural riparian corridors and their natural function of reducing velocity of flood waters. ***Editor's Note*** *- Fences and irrigation infrastructure (e.g. irrigation tape) in rural areas should be managed to minimise adverse impacts that they may have on downstream properties in the event of a flood.*
	AO8.2 Development on land in a flood hazard area either: (1) does not involve a net increase in filling greater than 50m³ where located in a non-urban area; or (2) does not result in any reductions of on-site flood storage capacity and contain within the subject site any changes to depth, duration and velocity of floodwaters; or (3) does not change flood characteristics outside the subject site in ways that result in: (a) loss of flood storage; (b) loss of/changes to flow paths; (c) acceleration or retardation of flows; and (d) any reduction in flood warning times elsewhere on the floodplain. ***Note -*** *A hydraulic and hydrology report, prepared by a suitably qualified person can be prepared to demonstrate compliance with this performance outcome.*
	AO8.3 Where development is located in an area affected by a *defined flood event*, a hydraulic and hydrology report, prepared by a *suitably qualified person*, demonstrates that the development: (1) maintains the flood storage capacity on the subject site; (2) does not increase the volume, velocity,

Performance Outcomes	Acceptable Outcomes
	concentration or flow path alignment of stormwater flow across sites upstream, downstream or in the general vicinity of the subject site; and (3) does not increase stormwater ponding on sites upstream, downstream or in the general vicinity of the subject site.
	AO8.4 Works in urban areas associated with the proposed development do not involve: (1) any physical alteration to a watercourse or floodway including vegetation clearing; and/or (2) a net increase in filling (including berms / mounds). ***Editor's note** - Berms/mounds are considered to be an undesirable built form outcome and are not supported.*

Table 8.2.6.3.2 Minimum flood immunity standards for infrastructure

Infrastructure Type	Settlement context^	Floodplain context*	Minimum immunity
Transport infrastructure			
Any transport infrastructure as defined by the Regulation	All	All	No specific recommended flood level, but development proponents should ensure that the infrastructure is optimally located and designed to achieve suitable levels of service, having regard to the processes and policies of the administering government agency.
Needing to operate during and immediately after a flood event			
Hospitals and associated institutions Emergency services facility (including police facilities)	All	High hazard or limited warning (e.g. less than 24 hours)	Locate outside PMF or other available extreme event (such as 0.2% AEP*, at a minimum)
Water cycle management infrastructure (water treatment plant) Facilities used as an evacuation or recovery facility in addition to their normal function (e.g. sporting facility, community centre, meeting hall)	All	High hazard and longer warning	Locate outside 0.2% AEP* **OR** Building floor levels above 0.2% AEP* plus freeboard.
		Lower hazard and longer warning	
Involving vulnerable persons			
Retirement village Residential care facility Facility where an education and care service under the Education and Care Services National Law (Queensland) is operated or a childcare service under the *Child Care Act 2002* is conducted Correctional facility Education establishment	Small town/rural settlement	High hazard or limited warning (e.g. less than 24 hours)	Locate outside PMF or other available extreme event (such as 0.2% AEP, at a minimum).
		High hazard and longer warning	Locate outside 1% AEP.
		Lower hazard and longer warning	Locate outside 1% AEP. **OR** Building floor levels above 1%AEP + freeboard.
	Larger urban centre	High hazard or limited warning (e.g. less than 24 hours)	Locate outside PMF or other available extreme event (such as 0.2% AEP).
		Lower hazard or longer warning	Locate outside 1% AEP.
Needing to operate soon after a flood event			
Cemetery and crematorium	All	High hazard or	Locate outside 1% AEP.

Infrastructure Type	Settlement context^	Floodplain context*	Minimum immunity
Sporting facility, community centre, meeting hall (where not uses as an evacuation or recovery facility) Waste management facilities Storage and works depots and similar facilities, including administrative facilities associated with the provision or maintenance of the community infrastructure mentioned in this part.		limited warning (e.g. less than 24 hours)	
		High hazard and longer warning	Locate outside 1% AEP. **OR** Building floor levels above 1%AEP + freeboard.
		Lower hazard and longer warning	
Facilities with potential primarily for property loss			
Gallery, museum, library and any other similar community/cultural facility/use	All	High hazard or limited warning (e.g. less than 24 hours)	Locate outside 0.5% AEP.
		High hazard and longer warning	Locate outside 1% AEP. **OR** Building floor levels above 1%AEP + freeboard.
		Lower hazard and longer warning	
Other infrastructure			
Any other infrastructure as defined by the Regulation	All	All	Unless stated through other infrastructure.

*0.5% AEP for water cycle management infrastructure (water treatment plant)

Table 8.2.6.3.3 Low Hazard Evacuation Routes

Criteria	Degree of Flood Hazard			
	Low	**Medium**	**High**	**Extreme**
Wading ability	If necessary children and the elderly could wade. (Generally, safe wading velocity depth product is less than 0.25).	Fit adults can wade. (Generally, safe wading velocity depth product is less than 0.4).	Fit adults would have difficulty wading. (Generally, where wading velocity depth product is less than 0.6.)	Wading is not an option.
Evacuation distances	<200 metres	200-400 metres	400-600 metres	>600 metres
Maximum Flood Depths	<0.3 metres	<0.6 metres	<1.2 metres	>1.2 metres
Maximum Flood Velocity	<0.4 metres per second	<0.8 metres per second	<1.5 metres per second	>1.5 metres per second
Typical means of egress	Sedan	Sedan early, but 4WD or trucks later.	4WD or trucks only in early stages, boats or helicopters	Large trucks, boats or helicopters.

8.2.7 Landslide Hazard and Steep Slope Overlay Code

8.2.7.1 Application

This code applies to development:

(1) within the Landslide Hazard and Steep Slope Overlay as identified on the overlay maps contained in **Schedule 2 Mapping**; and

(2) identified as requiring assessment against the Landslide Hazard and Steep Slope Overlay Code by the tables of assessment in **Part 5 Tables of Assessment**.

Editor's Note *- The following reports may be referred to in relation to landslide and slope stability;*

(i) Slope Stability And Its Constraints On Closer Settlement On Tamborine Mountain, Southeast Queensland by W.F. Willmott May1981 Record 1981/14, and

(ii) Slope Stability And Its Constraints On Closer Settlement In The Canungra-Beechmont-Numinbah Area, Southeast Queensland by W.F. Willmott May1981 Record 1983/64

8.2.7.2 Purpose and Overall Outcomes

(1) The purpose of the Landslide Hazard and Steep Slope Overlay Code is to ensure development on land containing unstable slopes or steep slopes protects people, property and the environment from landslide hazards.

(2) The purpose of the code will be achieved through the following overall outcomes:

(a) Development does not materially increase the extent or severity of landslide risk on the site or to other properties;

(b) Development is not located in areas of intolerable landslide risk;

(c) Where risk cannot be practicably avoided, development is designed, located and managed to ensure the safety of people is maintained and the damage to property is mitigated to an acceptable or tolerable level;

(d) The potential for erosion or landslide are avoided or effectively mitigated;

(e) Development does not increase the number of people living and working in an area of high and very high landslide risk, except where the premises are occupied on a short term or intermittent basis;

(f) The risk of landslides damaging property or endangering persons is minimised;

(g) Development does not involve the manufacture of hazardous materials in bulk;

(h) Development avoids involving the establishment or intensification of vulnerable uses within or near areas that are subject to risk of landslide;

(i) Stormwater runoff and wastewater disposal is effectively managed so as not to increase the risk of landslide;

(j) Erosion events on slopes exceeding an average gradient of 15.1% are minimised;

(k) Visual amenity is not adversely affected by development;

(l) Safe and efficient vehicular and pedestrian access onto steeply sloping land is provided;

(m) Development supports, and does not unduly burden disaster management response or recovery capacity or capabilities.

(n) Natural processes and the protective function of landforms and/or vegetation are maintained in landslide hazard areas;

(o) Vegetation clearing, filling and/or excavation does not create a landslide risk and/or rectifies potential pre-existing landslide risks.

8.2.7.3 Assessment Benchmarks

Table 8.2.7.3.1 — Landslide Hazard and Steep Slope Overlay Code - for Accepted and Assessable Development

Performance Outcomes	Acceptable Outcomes
Steep Slope Area - Slope Hazard 15.1 - 20% or Steep Slope Area - Slope Hazard 20.1 - 25%, and Landslide Hazard - Medium	
PO1 Development siting and access: (1) ensures the safety of people on sites containing unstable or steep slopes is maintained; and (2) mitigates the potential damage to property to an acceptable or tolerable level.	**AO1** Development involving building, earthworks, vegetation clearing or an increase in the number of people living and working on a site, is undertaken on land identified as a *Steep Slope Area - Slope Hazard 15.1 - 20%* or *Steep Slope Area - Slope Hazard 20.1 - 25%*, and *Landslide Hazard - Medium*, only where a geotechnical stability assessment report, prepared and certified by a Registered Professional Engineer in Queensland (RPEQ), confirms that the proposed development: (1) is designed, located and managed to ensure the safety of people is maintained; (2) is located so that it is geologically stable in the long term and not at risk from landslide; (3) is appropriate for the sloping nature of the site; and (4) that the risk of landslide adversely affecting the subject lot, adjoining properties and the proposed development is at a low level. ***Note** - Certification is to consider all relevant matters including but not limited to safety of persons using the site, adjacent land stability impacts, rockfall, development siting and layout, vegetation and vegetation removal, waste disposal areas, stormwater management, earthworks, driveways, car parking and manoeuvring areas.*

Table 8.2.7.3.2 — Landslide Hazard and Steep Slope Overlay Code - for Assessable Development

Performance Outcomes	Acceptable Outcomes
Landslide Hazard and Steep Slope Constraints (Slope Hazard over 25% and Landslide Hazard Area - High and Very High)	
PO1 Development is not located in areas of intolerable landslide risk.	**AO1** Development is not undertaken on land identified as: • Steep Slope Area - Slope Hazard Over 25%; or • Landslide Hazard Area - High and Very High;

Performance Outcomes	Acceptable Outcomes
	unless: (1) a location with less slope and/or less geological instability risk is not available on the site for the development; and (2) a geotechnical stability assessment report undertaken by a suitably qualified person certifies that the development: (a) is designed, located and managed to ensure the safety of people is maintained; (b) is located so that it is geologically stable in the long term and not at risk from landslide; (c) is appropriate for the sloping nature of the site; and (d) that the risk of landslide adversely affecting the subject lot, adjoining properties and the proposed development is at a low level; (e) can manage the evacuation of people if involving institutional uses. ***Note** - A geotechnical stability assessment report, prepared and certified by an RPEQ, is to consider all relevant matters including but not limited to safety of persons using the site, adjacent land stability impacts, rockfall, development siting and layout, vegetation and vegetation removal, waste disposal areas, stormwater management, earthworks, driveways, car parking and manoeuvring areas.*
Specific Land Uses	
PO2 Development involving *vulnerable uses*: (1) is only established or expanded in areas of low or no risk; and (2) is not likely to burden disaster management response or recovery capacity and capabilities by having: (3) an increased number of people calculated to being at risk from land instability or landslide; (4) increase the number of people likely to need evacuation; and (5) impact on the ability of traffic to use evacuation routes, or unreasonably increase traffic volumes on evacuation routes in higher risk areas.	**AO2** A *vulnerable use* is not established or expanded in areas designated: (1) Landslide Hazard Area - High; or (2) Landslide Hazard Area - Very High; or (3) Steep Slope Area – Slope Hazard Over 25%.
PO3 The manufacture or storage of hazardous material in bulk is not located on land, or in the immediate surrounds of land, with a slope in excess of 15%, or in a Landslide Hazard Area.	**AO3** No acceptable outcome prescribed.
PO4 Development involving *infrastructure activities* includes measures identified by a site-specific geotechnical stability assessment report prepared by a *suitably qualified person* that ensures: (1) *infrastructure activities* are able to function effectively during and immediately after landslide events;	**AO4** No acceptable outcome prescribed.

Performance Outcomes	Acceptable Outcomes
(2) the long term stability of the site including associated buildings and infrastructure; (3) access to the site will not be impeded by a landslide event; and (4) the *infrastructure activities* will not be adversely affected by landslides originating from other land including land above the site.	
Built Form	
PO5 Development in Steep Slope Areas and Landslide Hazard Areas incorporates measures to minimise landslide risk level for the development site and for areas immediately surrounding the development site without significantly altering the characteristics of the land.	**AO5.1** Development located in a Steep Slope Area is located on the least steep part of the subject site.
	AO5.2 Existing vegetation is retained on land with a slope of 15% or greater.
	AO5.3 Development creates minimal disturbance to the natural ground levels.
Stormwater Drainage	
PO6 Development ensures that stormwater runoff does not: (1) increase the susceptibility of the site to landslide; and (2) does not cause detriment to the natural environment or to any other lots.	**AO6** Stormwater drainage (including roof guttering and rainwater tank overflows) is managed to avoid an increase in on-site groundwater, ponding of water and water concentration into slopes and discharges to a lawful point of discharge.
Wastewater	
PO7 Wastewater disposal does not create or increase the likelihood of instability of the site or neighbouring sites.	**AO7** Development ensures that: (1) where sewerage reticulation is available, wastewater is disposed of via a connection to sewerage reticulation; or (2) where sewerage reticulation is not available on site: (a) subsurface disposal of effluent is not used; and (b) effluent disposal areas are located in areas so as not to cause potential instability on site or on a neighbouring site. ***Note** - Certification is to be provided by a RPEQ, confirming that the location of the effluent disposal areas is appropriate for the sloping nature of the site.*
Vehicle and Pedestrian Access	
PO8 Development provides that vehicle and pedestrian access is designed and located to address slope satiability issues and control of erosion.	**AO8.1** Development is positioned on a site so that: (1) vehicle and pedestrian access avoids areas identified as: (a) Steep Slope Area - Slope Hazard over 25%; and (b) Landslide Hazard Areas; and (2) the amount and depth of any excavation required to construct internal vehicle and pedestrian access is minimised.

Performance Outcomes	Acceptable Outcomes
	AO8.2 Paths, driveways and roads: (1) are designed to: (a) follow natural contours and have the minimum length necessary; and (b) minimise the number of crossings of water courses and drainage lines; (c) allow for traffic to enter and leave the site in a forward gear; and (2) be sealed with asphalt, concrete or another type of hardstand where traversing a slope greater than 10%; and (3) do not traverse land with a slope exceeding 25%.
Operational Works	
PO9 Operational works (not associated with building work), is minimised and must not; (1) adversely affect slope stability; or (2) cause geological instability; (3) create erosion potential; or (4) create a potential risk to structures or personal safety.	**AO9.1** Development involving operational works is supported by a RPEQ certified geotechnical report, which: (1) adequately addresses and documents the site's geotechnical stability and constraints; (2) incorporates necessary mitigation measures so that the level of landslide risk to property and persons is low; (3) ensures surface waters are managed and will not cause erosion both during the works being undertaken, and in an ongoing basis.
	AO9.2 Development creates minimal disturbance to the natural ground levels.
Vegetation	
PO10 To minimise the risk of landslide, land instability, degradation of slopes, erosion or scouring, development: (1) creates minimal disturbance to existing vegetation significant to the stabilisation of the land; and (2) revegetates areas to increase the stabilisation of the land.	**AO10** Development: (1) retains vegetation in slopes, gullies, existing and potential landslip areas; and (2) revegetates slopes, gullies, existing and potential landslip areas with: (a) grasses; (b) dense landscaping; or (c) a combination of (a) and (b). ***Note*** *- Vegetation management is to be considered by a RPEQ in a Geotechnical Stability Assessment Report.*
PO11 Development for community services activities: a) is not at risk from landslide hazards; or will function without impediment from a landslide; b) provides access to the infrastructure without impediment from the effects of a landslide c) does not contribute to elevated risk of landslide to adjoining properties.	**AO11** Development involving community services activities includes measures identified by a site-specific geotechnical assessment prepared by a competent person that ensures: a) the long-term stability of the site including associated building and infrastructure b) access to the site will not be impeded by a landslide event, and c) the community infrastructure will not be

Performance Outcomes	Acceptable Outcomes
	adversely affected by landslides originating from other land, including land above the site.
Reconfiguring a Lot	
PO12 Development involving reconfiguration of a lot: (1) has a low level of landslide risk; (2) does not increase the landslide hazard risk for adjoining and nearby sites; and (3) does not result in an increase in the number of people living, congregating or working on land in high risk areas.	**AO12.1** Additional lots are not created in: (1) Landslide Hazard Area - High; or (2) Landslide Hazard Area - Very High; or (3) Steep Slope Area – Slope Hazard Over 25%.
	AO12.2 Development does not involve reconfiguring a lot for a vulnerable use.
	AO12.3 Retaining walls have a maximum height of 1.5 metres.
	AO12.4 Development involves minimal disturbance to the natural ground levels.
PO13 Reconfigured lots provide a building envelope that: (1) is large enough to at least accommodate a dwelling house, outdoor recreation area, water supply/storage, and on site wastewater treatment system (where not connected to the reticulated network); (2) is geologically stable in the long term and does not increase the rock fall or landslide risk for adjoining and nearby sites; and (3) does not impose unreasonable building constraints for future uses; (4) would not result in the removal of vegetation important to ground stability; and (5) achieves a safe and efficient access by vehicles and pedestrians to a formed legal road access.	**AO13.1** Reconfigured lots intended to accommodate a future dwelling house provides a building envelope: (1) with a minimum area of 1,000m^2; (2) with a minimum dimension of 18 metres; (3) on land with a slope less than 15.1%; (4) is demonstrated to have a low level of landslide risk; and (5) provides any benching or retaining walls at a maximum height of 1.5 metres.
	AO13.2 Reconfigured lots intended to accommodate uses other than a dwelling house provides a building envelope: (1) with a minimum area of 1,000m^2; (2) with a minimum dimension of 18 metres; (3) on land with a slope less than 15.1%; (4) that has an area large enough to facilitate the proposed use, car parking, water supply/storage and on site wastewater treatment system (where not connected to the reticulated network); (5) is demonstrated to have a low level of landslide risk; and (6) provides any benching or retaining walls at a maximum height of 1.5 metres.
	AO13.3 The building envelope is connected to a constructed public road by a driveway or road that: (1) is designed to: (a) follow natural contours and have the minimum length necessary; and (b) minimise the number of crossings of water courses and drainage lines; and (2) be sealed with asphalt, concrete or another type

Performance Outcomes	Acceptable Outcomes
	of hardstand where traversing a slope greater than 10%; and (3) does not traverse land with a slope exceeding 25%.
	AO13.4 The building envelope is located in an area that: (1) does not require the removal of vegetation; or (2) is located in an area with a slope less than 15.1% slope.

8.2.8 Local Heritage Overlay Code

8.2.8.1 Application

This code applies to development:

(1) within the Local Heritage Overlay as identified on the overlay maps contained in **Schedule 2 Mapping**; and

(2) identified as requiring assessment against the Local Heritage Overlay Code by the tables of assessment in **Part 5 Tables of Assessment**.

***Note** - The **Local Heritage Overlay Map OM-08** identifies places that are included on the Scenic Rim Local Heritage Register, which was prepared in accordance with the Queensland Heritage Act 1992.*

***Note** - The provisions of the Queensland Heritage Regulation 2003, including the Code for IDAS in Schedule 2, also apply to development on places listed in the Scenic Rim Local Heritage Register.*

8.2.8.2 Purpose and Overall Outcomes

(1) The purpose of the Local Heritage Overlay Code is to ensure that development of Local Heritage Places conserves the local heritage significance of that place for the benefit of the community and future generations.

(2) The purpose of the code will be achieved through the following overall outcomes:

(a) Development affecting a place of local cultural heritage significance is compatible with the heritage significance of the place by:

(i) retaining the heritage place, unless there is no prudent and feasible alternative to its demolition or removal;

(ii) adaptive reuse occurs where appropriate and where impacts can be managed to an acceptable level;

(iii) ensuring the development is informed and influenced by the cultural heritage significance of the Local Heritage Place;

(iv) ensuring the Local Heritage Place is used in a way appropriate to its cultural heritage significance the development increases the community's appreciation of the heritage values of the Local Heritage Place.

***Note** - In considering where there is no prudent or feasible alternative to the demolition or removal of a Local Heritage Place, consideration will be given to:*
(1) *safety, health and economic considerations; and*
(2) *any other matters that Council considers relevant.*

***Editor's Note** - A copy of the **Burra Charter**: The Australian International Council on Monuments and Sites (ICOMOS) Charter for Places of Cultural can be obtained via the following link - http://australia.icomos.org/publications/charters/.*

8.2.8.3 Assessment Benchmarks

Table 8.2.8.3.1 —Local Heritage Overlay Code - for Assessable Development

Performance Outcomes	Acceptable Outcomes
Material Change of Use	
PO1 Development is compatible with the conservation and management of the cultural heritage significance of the Local Heritage Place.	**AO1** Development is undertaken in accordance with *The Burra Charter: The Australian International Council on Monuments and Sites (ICOMOS) Charter for Places of Cultural Heritage Significance*.
Reconfiguring a Lot	
PO2 Reconfiguration does not: (1) reduce public access to the place; or (2) obscure or destroy any pattern of historic subdivisions, the landscape settings or the scale and consistency of urban precincts relating to the place; or (3) result in a Local Heritage Place being severed or obscured from public view.	**AO2** Development is undertaken in accordance with *The Burra Charter: The Australian International Council on Monuments and Sites (ICOMOS) Charter for Places of Cultural Heritage Significance.*
Carrying Out Building Work or Operational Work	
PO3 Development conserves and is subservient to the features and values of the Local Heritage Place that contribute to its cultural heritage significance.	**AO3.1** Development does not alter, remove, or conceal significant features of the place.
	AO3.2 Development is minor and necessary to maintain a significant use for the place.
PO4 Changes to the Local Heritage Places are appropriately managed and documented.	**AO4.1** Development is compatible with a conservation management plan prepared in accordance with *The Burra Charter: The Australian International Council on Monuments and Sites (ICOMOS) Charter for Places of Cultural Heritage Significance.*
	AO4.2 Where the development involves the removal or alteration of significant features of the place, an archival quality photographic record is made in accordance with the standards outlined in the *Archival Recording of Heritage Registered Places* guideline, Department of Environment and Heritage Protection (EHP), 2013.
PO5 Development does not adversely affect the character, setting or appearance of the Local Heritage Place.	**AO5.1** The scale, location and design of the development are compatible with the character, setting and appearance of the Local Heritage Place.
	AO5.2 The development is unobtrusive and cannot readily be seen from surrounding streets or other public places.
PO6	**AO6.1**

Performance Outcomes	Acceptable Outcomes
Excavation or other earthworks do not have a detrimental impact on archaeological sites.	The impact of excavation is minor and limited to parts of the Local Heritage Places that have been disturbed by previous excavation.
	AO6.2 An archaeological investigation is carried out for development involving a high level of surface or subsurface disturbance.

8.2.9 Regional Infrastructure Overlay Code

8.2.9.1 Application

This code applies to development:

(1) within the Regional Infrastructure Overlay as identified on the overlay maps contained in **Schedule 2 Mapping**; and

(2) identified as requiring assessment against the Regional Infrastructure Overlay Code by the tables of assessment in **Part 5 Tables of Assessment**.

8.2.9.2 Purpose and Overall Outcomes

(1) The purpose of the Regional Infrastructure Overlay Code is to ensure that development is compatible with, and does not adversely affect the viability, operation and maintenance of the following existing and planned Regional Infrastructure:

- (a) Bulk Water Supply Infrastructure;
- (b) Wastewater Treatment Plants;
- (c) *Major electricity infrastructure*;
- (d) Future Roads; and
- (e) Rail Network.

(2) The purpose of the code will be achieved through the following overall outcomes:

- (a) Development located on land identified on the **Regional Infrastructure Overlay Map - Water and Wastewater Infrastructure OM-09-A** and **Regional Infrastructure Overlay Map - Electricity, Roads and Rail Infrastructure OM-09-B** is located, designed, constructed and operated to:
  - (i) avoid compromising the efficiency, integrity, operation and maintenance of existing and planned Regional Infrastructure;
  - (ii) protect the amenity, health and safety of people and property; and
  - (iii) identify, protect and manage key infrastructure sites and corridors.

Editor's note *- Bulk Water Supply Infrastructure is defined within the State Planning Policy. The following Bulk Water Supply Infrastructure is the infrastructure applicable in the Scenic Rim Planning Scheme area;*

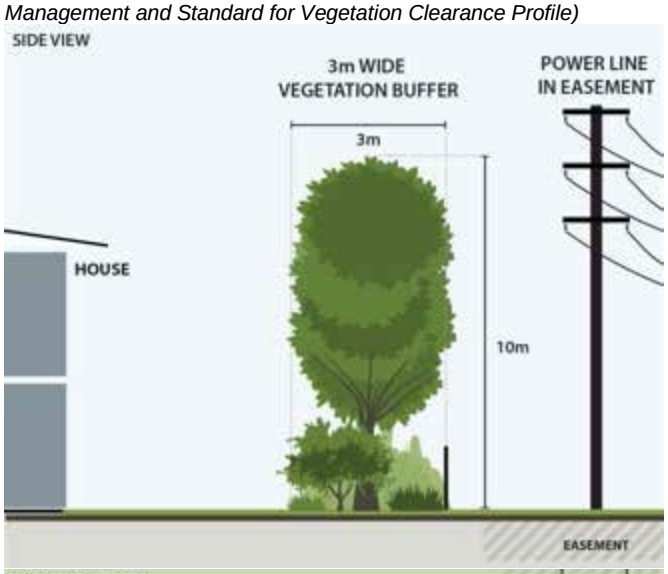
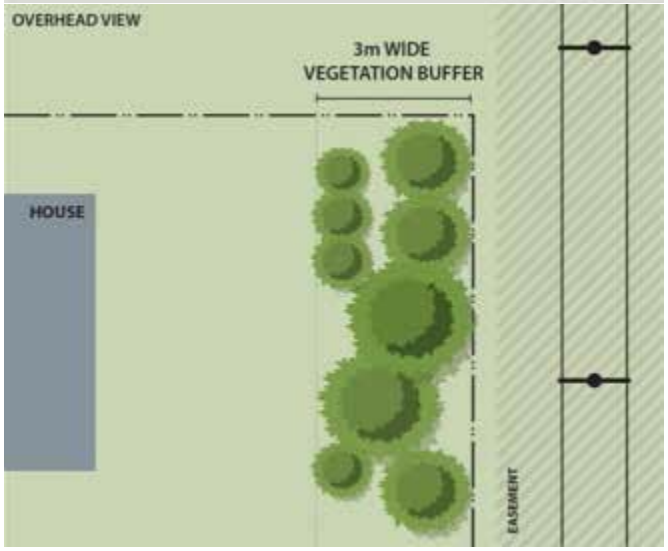
- *pump station facilities and reservoir facilities;*
- *water treatment plants and water quality facilities;*
- *pipelines and channels; and*
- *bulk water storage infrastructure.*

Editor's note *- Road Investigation Corridors are for the preservation of road corridors which may be required at some stage in the future to support road network efficiency. The identification of these corridors does not commit the local government nor State government to deliver the roads within a specific timeframe. They do not represent State Government planned or funded infrastructure projects.*

8.2.9.3 Assessment Benchmarks

Table 8.2.9.3.1 — Regional Infrastructure Overlay Code - for Accepted and Assessable Development

Performance Outcomes	Acceptable Outcomes
Major Electricity Infrastructure	
PO1 Development in a *Major electricity infrastructure* Buffer Area does not increase: (1) risk to community health or safety; or (2) risk to the operation and reliability of *Major electricity infrastructure*. ***Editor's note** - Applicants should contact the relevant electrical provider for further information regarding setbacks for buildings and structures in and near an easement.*	**AO1.1** Development being a *sensitive land use* (excluding class 10 buildings) maintains the following separation distances: (1) 20m either side of the centre line for 110kV Transmission Lines; (2) 10m either side of the centre line for 33kV Transmission Lines; or (3) 10m from the shared boundary of an Electricity Substation property.
	AO1.2 Development is not located within a transmission line easement.
	AO1.3 Development other than a *sensitive land use* maintains a setback of at least 10m from any lot containing an Electricity Substation.
PO2 Residential buildings, other than where they are separated from the infrastructure by a road, are oriented to avoid direct overlooking of *Major electricity infrastructure.*	**AO2.1** Windows and balconies of residential buildings do not face easements and infrastructure sites. ***Editor's note** - the figure below provides an illustration of buildings oriented away from infrastructure* 
	AO2.2 Views from residential buildings to infrastructure are screened by devices attached to the building.
PO3 Landscaping is provided within sites adjoining *Major electricity infrastructure* which substantively assists in screening and softening of the *Major electricity infrastructure*.	**AO3.1** A minimum 3m wide densely planted landscaping buffer is provided along the boundary adjoining *Major electricity infrastructure* (excluding Electricity Substation), including provision for advanced trees and shrubs that will grow to a minimum height of 10m. ***Editor's Note** - Applicants may find guidance in Powerlink's "Screening your home from powerlines - a guide to planting trees and shrubs outside of easements to screen powerlines".*

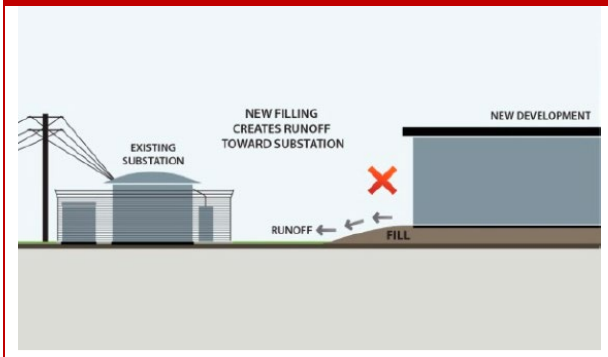
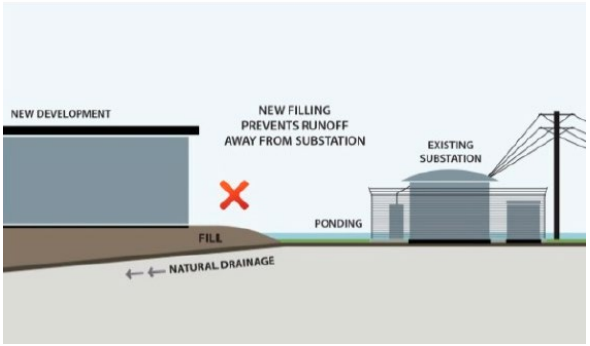
Performance Outcomes	Acceptable Outcomes
	AO3.2 A minimum 2m wide densely planted landscaping buffer is provided along the boundary adjoining an Electricity Substation, including provision for advanced trees and shrubs that will grow to a height which blocks direct views from habitable rooms to an Electricity Substation. ***Editor's note*** *- The figures below provide an example but are not drawn to scale. Applicants may find guidance in Powerlink's "Screening your home from powerlines—a guide to planting trees and shrubs outside of easements to screen powerlines". Applicants should also note that vegetation will need to maintain statutory clearances (for further guidance, refer to Ergon's Standard for Vegetation Management and Standard for Vegetation Clearance Profile)*  
PO4 Development is located and designed to maintain access to *Major electricity infrastructure*.	**AO4** Development does not limit or interfere with access on existing or proposed *Major electricity infrastructure* easements with: (1) landscaping; (2) fencing; (3) storage of equipment or materials; (4) construction of buildings; or

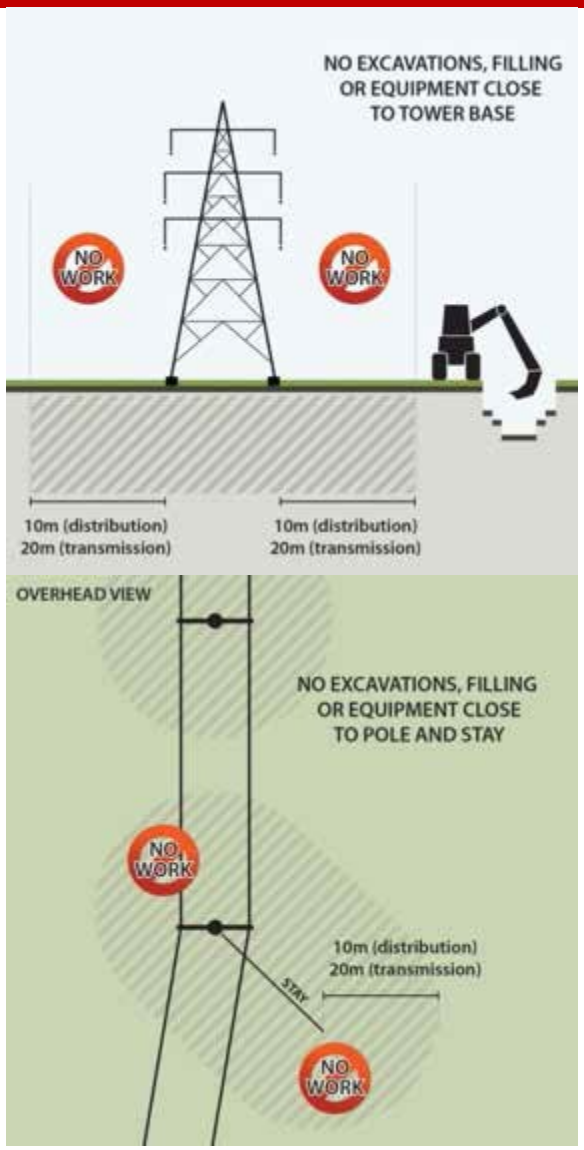
Performance Outcomes	Acceptable Outcomes
	(5) earthworks which alter levels along the boundaries of or within easements by more than 100mm; and (6) earthworks which cause a worsening of inundation or retention of water.
Wastewater Treatment Plants and Bulk Water Supply Infrastructure	
PO5 Development in a Bulk Water Supply Buffer Area or Wastewater Treatment Plant Buffer Area: (1) does not increase risk to community health or safety; (2) does not increase risk to the operation and reliability of Bulk Water Supply Infrastructure and Wastewater Treatment Plants; and (3) is separated from Bulk Water Supply Infrastructure to protect the integrity and safety of the infrastructure.	**AO5.1** Development being a *sensitive land use* is not located or intensified within a Bulk Water Supply Buffer Area.
	AO5.2 Development, other than a *sensitive land use*, does not occur within: (1) 20m of Pipelines and Channels; and (2) 50m of a: (a) Pump Station Facility; (b) Bulk Water Storage Infrastructure; or (c) Bulk Water Facility.
	AO5.3 Development including a *major hazard facility,* Extractive industry or any use involving explosive blasting does not occur within: (1) 50m of a Pipelines and Channels; and (2) 100m of a: (a) Pump Station Facility; (b) Bulk Water Storage Infrastructure; or (c) Bulk Water Facility.
	AO5.4 Development is not located or intensified within a Wastewater Treatment Plant Buffer Area.
Future Roads and Rail Network	
PO6 Road Investigation Corridors and the Rail Network are: (1) protected from development to facilitate the ongoing operation and maintenance of existing major road and rail infrastructure; (2) protected from development that may adversely affect the safety and efficiency of the infrastructure, corridors and networks; and (3) protected from development to facilitate the construction and operation of future major road and rail infrastructure.	**AO6.2** No buildings or permanent structures (excluding fencing) are located or constructed within: (1) a Road Investigation Corridor; or (2) a Rail Buffer Area.
PO7 *Sensitive land uses* are not significantly impacted by environmental emissions generated by (existing or future) major road or rail infrastructure. ***Editor's note*** *- Environmental emissions include noise, air, vibration and light emissions.*	**AO7** *Sensitive land uses* are not located within a Rail Buffer Area or Road Investigation Corridor.
PO8 Ensure development does not undermine the structural integrity of the Existing Rail Network.	**AO8** Development (excluding fences) is set back at least 25m from any boundary or easement of an Existing Rail Network.

Performance Outcomes	Acceptable Outcomes
PO9 Development involving the handling, use or storage of hazardous and dangerous goods is not located adjacent to: (1) Road Investigation Corridor; or (2) Existing Rail Network; or (3) Future rail network.	**AO9** Development involving the handling, use or storage of hazardous and dangerous goods is located at least 100m from a: (1) Road Investigation Corridor; or (2) Existing Rail Network; or (3) Future Rail Network.

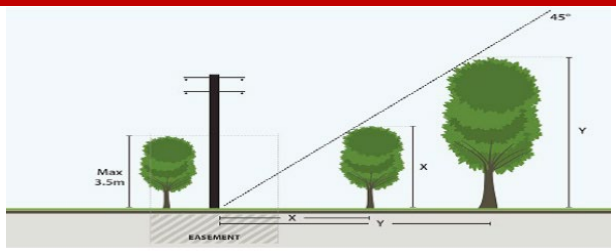
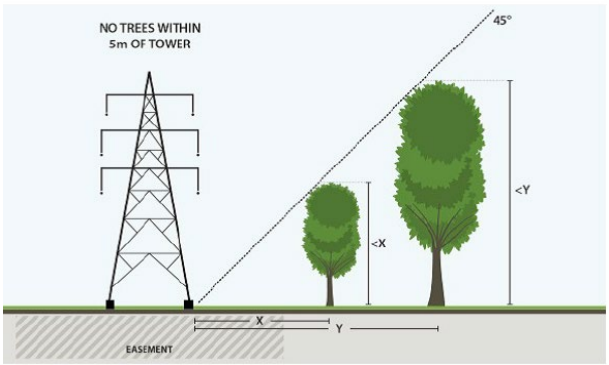
Table 8.2.9.3.2 — Regional Infrastructure Overlay Code - for Assessable Development

Performance Outcomes	Acceptable Outcomes
Major Electricity Infrastructure	
PO1 *Major electricity infrastructure* on private land is protected by an easement in favour of the service provider.	**AO1** No Acceptable Outcome is prescribed.
PO2 Development does not compromise or adversely impact upon the efficiency and integrity of *Major electricity infrastructure* networks.	**AO2** No Acceptable Outcome is prescribed.
PO3 Earthworks do not restrict access to *Major electricity infrastructure*.	**AO3** **For Operational Works only** Earthworks: (1) do not alter levels along the boundaries of or within existing or proposed *Major electricity infrastructure* easements by more than 100mm; and (2) do not cause the worsening of inundation to *Major electricity infrastructure*.
PO4 There is no worsening of flooding, drainage or erosion conditions affecting the *Major electricity infrastructure.* ***Editor's note*** *- The figures below illustrate the concept.*	**AO4** No Acceptable Outcome is prescribed.

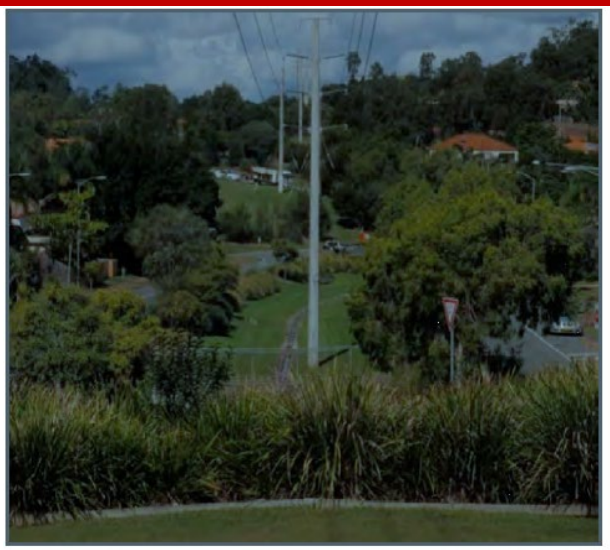
Performance Outcomes	Acceptable Outcomes
 	
PO5 Development maintains a safe clearance from all powerlines.	**AO5** **For Operational Works only** Development maintains the clearances required under Schedules 4 and 5 of the Electrical Safety Regulations 2013.
PO6 Any earthworks are undertaken in a way which: (1) ensures stability of the land on or adjoining *Major electricity infrastructure*; (2) does not otherwise impact on the safety and reliability of the *Major electricity infrastructure*; and does not restrict the placement or use of the *Major electricity infrastructure* provider's equipment.	**AO6.1** **For Operational Works only** No earthworks are undertaken: (1) within 20m either side of the centre line of 110kV Transmission Line; or (2) within 10m either side of the centre line of 33kV Transmission Line; or. (3) 10m from the shared boundary of an Electricity Substation property. ***Editor's note*** *- The figures below illustrate the concept.*

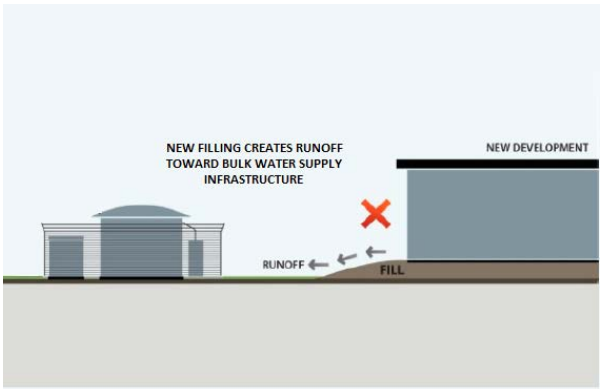
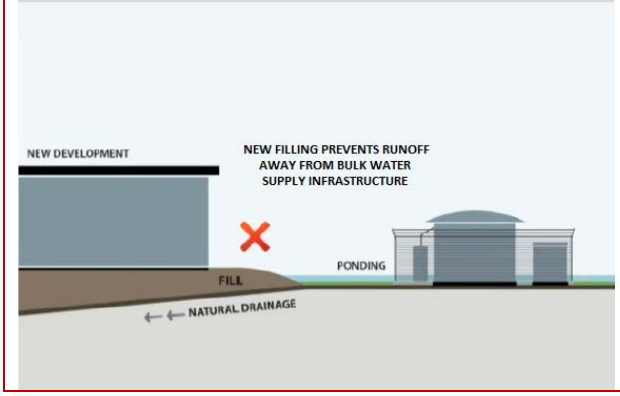
Performance Outcomes	Acceptable Outcomes
	
	AO6.2 **For Operational Works only** No earthworks are undertaken, or other loading or displacement of earth caused, within the easement of an underground power line.
PO7 Other services and infrastructure works (which may include stormwater, sewerage or water) do not impact on the safety and reliability of *Major electricity infrastructure.*	**AO7.1** **For Operational Works only** Underground services are not located within: (1) 20m of a tower, pole or stay for a 110kV Transmission Line; (2) 10m of a tower, pole or stay for a 33kV Transmission Line; (3) a vacant *Major electricity infrastructure* easement; or (4) 10m of an Electricity Substation property boundary.

Performance Outcomes	Acceptable Outcomes
	AO7.2 **For Operational Works only** No valve pits occur within: (1) 60m of a tower, pole or stay for a 110kV Transmission Line; or (2) 10m of a tower, pole or stay for a 33kV Transmission Line.
	AO7.3 **For Operational Works only** Underground services traversing an easement, cross at angles between 60 and 90 degrees to the overhead or underground lines.
	AO7.4 **For Operational Works only** Trenches for services are backfilled to be compacted in 150 mm layers to at least 95% modified dry density compaction ratio.
	AO7.5 **For Operational Works only** Trenches under construction are not left open overnight.
PO8 Vegetation does not pose a risk to the safety or reliability of *Major electricity infrastructure*.	**AO8.1** **For Operational Works only** Where vegetation is planted near or under an overhead power line (whether located in an easement or otherwise) it must be planted: (1) at least 5m either side of the area directly below the conductors where not within the area of influence of a power line; and (2) where within 20m of a power line structure, pole or stay, has a mature height of not more than 3.5m.
	AO8.2 **For Operational Works only** Vegetation planted within an underground powerline easement has a mature root system less than 150 mm in depth and is not located within 1 metre of the area directly above the powerline.
	AO8.3 **For Operational Works only** Vegetation adjoining easements complies with the clearance dimensions illustrated in the figures below.

Performance Outcomes	Acceptable Outcomes
	  **AO8.4** **For Operational Works only** Planting complies with (as relevant to the infrastructure concerned) either: (1) Energex's *Safe Tree* Guidelines; (2) Ergon's *Plant Smart* brochures; or (3) Powerlink's *Screening Your Home from Powerlines* information sheet
PO9 Lot reconfiguration integrates *Major electricity infrastructure* within the overall neighbourhood layout. In particular, the neighbourhood design: (1) ensures land of sufficient size and suitability is located to accommodate the existing and future major infrastructure network; (2) minimises the likely visual prominence of major infrastructure; and (3) provides for an interface or relationship with surrounding land uses that minimises the potential for nuisance (including noise and odour), health and safety concerns.	**AO9** **For Reconfiguring a Lot only** No Acceptable Outcome is prescribed.
PO10 Reconfiguration does not intensify development within an easement for *Major electricity infrastructure* in a way that would impede access to the infrastructure by a responsible entity.	**AO10** **For Reconfiguring a Lot only** The number of lots within an easement is not increased. *Editor's note - The images below provide examples of subdivision design near an easement.*

Performance Outcomes	Acceptable Outcomes
	 
PO11 Where the reconfiguration involves a *Major electricity infrastructure* corridor, the corridor is incorporated within a useable public open space network wherever possible.	**AO11** **For Reconfiguring a Lot only** No Acceptable Outcome is prescribed.
PO12 Where *Major electricity infrastructure* is located within public open space, the dimensions and characteristics of the open space area are sufficient to accommodate the electricity easement on site, in combination with compatible recreational facilities and landscaping, which ensure: (1) it has an open and expansive character, with landscaping design which assists in breaking up the linear and vertical dominance of the infrastructure;	**AO12** **For Reconfiguring a Lot only** No Acceptable Outcome is prescribed. ***Editor's note*** *- The figures below provide examples of a well-integrated transmission corridor.*

Performance Outcomes	Acceptable Outcomes
(2) landscaping is located outside the easement area and substantively screens and softens the appearance of poles, towers or other structures; (3) recreational facilities and landscaping are compatible with the electricity infrastructure, having regard to safety, height, the conductivity of materials and access to the electricity infrastructure by the electricity provider; and (4) the design is such that the function of the open space for recreation purposes is maintained.	 
Wastewater Treatment Plants and Bulk Water Supply Infrastructure	
PO13 Development in a Bulk Water Supply Buffer Area or Wastewater Treatment Plant Buffer Area: (1) does not increase risk to community health or safety; (2) does not increase risk to the operation and reliability of Bulk Water Supply Infrastructure and Wastewater Treatment Plants; and (3) is separated from Bulk Water Supply Infrastructure to protect the integrity and safety of the infrastructure.	**AO13** **For Reconfiguring a Lot only** Reconfiguring a lot within a Bulk Water Supply Buffer Area or Wastewater Treatment Plant Buffer Area: (1) does not result in the creation of additional lots used or capable of being used for sensitive land uses; and (2) where realigning boundaries, does not worsen the existing situation with respect to the distance between sensitive land uses and the Bulk Water Supply Infrastructure and Wastewater Treatment Plant.
PO14 Development: (1) is screened from Bulk Water Supply Infrastructure and Wastewater Treatment Plant; and (2) ensures that the location and type of planting does not have an adverse effect on Bulk Water Supply Infrastructure or Wastewater Treatment Plant infrastructure (including any associated buildings)	**AO14.1** A minimum 3m wide *screen landscaping* buffer is provided between development and the Bulk Water Supply Infrastructure or Wastewater Treatment Plant.
	AO14.2 Planting is not undertaken within an easement.
	AO14.3 Plant species will not damage Bulk Water Supply Infrastructure or Wastewater Treatment Plant infrastructure (including any associated buildings).

Performance Outcomes	Acceptable Outcomes
PO15 Bulk Water Supply Infrastructure and Wastewater Treatment Plant infrastructure on private land is protected by an easement in favour of the service provider.	**AO15** Existing Bulk Water Supply Infrastructure and Wastewater Treatment Plant easements are maintained and where none currently exist, new easements are created which are sufficient for the provider's requirements.
PO16 Development is located and designed to maintain access to Bulk Water Supply Infrastructure and Wastewater Treatment Plant infrastructure.	**AO16** Development does not limit access to Bulk Water Supply Infrastructure or Wastewater Treatment Plant infrastructure with: (1) landscaping along boundaries of, or traversing existing or proposed infrastructure easements; (2) fences constructed along the boundaries of, or traversing existing or proposed infrastructure easements; (3) storage of equipment or materials within or along the boundaries of existing or proposed infrastructure easements; (4) construction of buildings within or along the boundaries of existing or proposed infrastructure easements; or (5) earthworks which alter levels along the boundaries of or within easements by more than 100mm and do not cause any worsening of inundation to existing infrastructure.
PO17 There is no worsening of flooding, drainage or erosion conditions affecting the Bulk Water Supply Infrastructure or Wastewater Treatment Plants. ***Editor's note*** *- The figures below illustrate the concept.*   	**AO17** **For Operational Works only** No acceptable outcome is nominated.

Performance Outcomes	Acceptable Outcomes
PO18 Any earthworks undertaken adjoining Bulk Water Supply Infrastructure or Wastewater Treatment Plant ensures no adverse impacts the infrastructure.	**AO18.1** **For Operational Works only** Excavation and filling activities are undertaken in a manner to minimise erosion and sediment movement.
	AO18.2 **For Operational Works only** There is no worsening of flooding drainage or erosion conditions affecting the Bulk Water Supply Infrastructure or Wastewater Treatment Plant.
	AO18.3 **For Operational Works only** No permanent barrier is to be constructed that: (1) limits access to Bulk Water Supply Infrastructure or Wastewater Treatment Plant; or (2) prevents legal access from a public place for the purpose of maintenance.
PO19 Lot reconfiguration integrates Bulk Water Supply Infrastructure or Wastewater Treatment Plant within the overall neighbourhood layout. In particular, the neighbourhood design: (1) ensures land of sufficient size and suitability is located to accommodate the existing and future major infrastructure network; (2) minimises the likely visual prominence of major infrastructure; and (3) provides for an interface or relationship with surrounding land uses that minimises the potential for nuisance (including noise and odour), health and safety concerns.	**AO19** **For Reconfiguring a Lot only** No Acceptable Outcome is prescribed.
PO20 Reconfiguration does not intensify development within an easement for Bulk Water Supply Infrastructure or Wastewater Treatment Plant in a way that would impede access to the infrastructure by a responsible entity.	**AO20** **For Reconfiguring a Lot only** The number of lots within an easement is not increased. ***Editor's note**: - The images below provide examples of subdivision design near an easement.*

Performance Outcomes	Acceptable Outcomes
	 
PO21 Where the reconfiguration involves additional lots encroaching Bulk Water Supply Infrastructure or Wastewater Treatment Plant, development ensures there are no adverse impacts on the infrastructure.	**AO21.1** **For Reconfiguring a Lot only** Development: (1) does not limit access to Bulk Water Supply Infrastructure or Wastewater Treatment Plant infrastructure; and (2) maintains legal access from a public place for the purpose of maintenance.
	AO21.2 **For Reconfiguring a Lot only** Stormwater management does not cause an adverse impact on drinking water quality.
Future Roads and Rail Network	

Performance Outcomes	Acceptable Outcomes
PO22 Road Investigation Corridors and the Rail Network are: (1) protected from development to facilitate the ongoing operation and maintenance of existing major road and rail infrastructure; (2) protected from development that may adversely affect the safety and efficiency of the infrastructure, corridors and networks; and (3) protected from development to facilitate the construction and operation of future major road and rail infrastructure.	**AO22.1** **For Reconfiguring a Lot only** No additional lots are created within a Rail Buffer Area.
	AO22.2 No buildings or permanent structures (excluding fencing) are located or constructed within: (1) a Road Investigation Corridor; or (2) a Rail Buffer Area.
	AO22.3 **For Reconfiguring a Lot only** Where a site contains a Road Investigation Corridor, the subdivision layout dedicates a road corridor wide enough to facilitate a sub-arterial or arterial road along the corridor.
	AO22.4 **For Reconfiguring a Lot only** Where involving realigning boundaries, development does not result in additional lots within a Rail Buffer Area.
PO23 Development in a Rail Buffer Area does not increase risk to: (1) community health or safety; and (2) the operation and maintenance of the existing or future rail network.	**AO23.1** No Acceptable Outcome is prescribed.

8.2.10 Water Resource Catchments Overlay Code

8.2.10.1 Application

This code applies to development:

(1) within the Water Resource Catchments Overlay as identified on the overlay maps contained in **Schedule 2 Mapping**; and

(2) identified as requiring assessment against the Water Resource Catchments Overlay Code by the tables of assessment in **Part 5 Tables of Assessment**.

8.2.10.2 Purpose and Overall Outcomes

(1) The purpose of the Water Resource Catchments Overlay Code is to:

(a) protect the quality of water that is used for human consumption and urban purposes within the Water Supply Buffer Area and Water Resource Catchment Area as shown in the **Water Resource Catchments Overlay Map - Catchment Area OM-10-A** and **Water Resource Catchments Overlay Map - Streams and Dams OM-10-B**; and

(b) ensure development is appropriately sited, designed and managed to maintain or improve water quality, flow regimes, environmental values and the physical integrity of natural processes to protect drinking water supply.

(2) The purpose of the code will be achieved through the following overall outcomes:

(a) Development:

(i) maintains or improves the quality of surface water and groundwater entering Urban Water Supply Storage areas;

(ii) does not increase the peak discharges or run-off volumes with the quantity of surface water generated from development;

(iii) does not compromise the drinking water supply environmental values identified in the Environmental Protection Policy (Water) 2009; and

(iv) protects the physical integrity of waterways, wetlands, lakes, springs, riparian areas and natural ecosystems that contribute to maintaining healthy functioning catchments.

8.2.10.3 Assessment Benchmarks

Table 8.2.10.3.1 — Water Resource Catchments Overlay Code - for Accepted and Assessable Development

Performance Outcomes	Acceptable Outcomes
Wastewater and Sewage	
PO1 Development requiring sewage-treatment facilities and disposal areas protects water quality entering waterways and Urban Water Supply Storage areas by maintaining an adequate separation distance from waterways. ***Editor's note:*** *refer to* ***Water Resource Catchments Overlay Map - Streams and Dams OM-10-B*** *for the location of waterways and Urban Water Supply Storage areas and refer to* ***Flood Hazard Overlay Map - Hazard Area OM-06-A*** *for an indication of areas with potential flood inundation.*	**AO1.1** Development does not generate wastewater. **OR** **AO1.2** Development is connected to reticulated sewer and does not involve an on-site sewerage treatment facility. **OR** **AO1.3** Development involves (or will involve in the case of reconfiguring a lot) a sewage-treatment facility and disposal area that complies with the following: (1) where involving a *Low density residential activity* or a *tourist accommodation site*, separation distances and locational criteria are in accordance with **Table 8.2.10.3.3 - Minimum Horizontal Separation Distances and Locational Criteria for Residential and Tourist Accommodation**; and (2) for all other development, separation distances and locational criteria are in accordance with **Table 8.2.10.3.4 — Separation Distance and Other Locational Criteria.** ***Note*** *- Where another setback distance or locational criteria is identified within this code, the higher standard applies.* ***Editor's Note:*** *Development involving reconfiguring a lot must demonstrate that the above requirements can be achieved.*
PO2 Where a site is being used for a *dairy*, development maintains or improves the quality of surface water by adopting measures that prevent livestock from entering a waterbody.	**AO2** Development fences all livestock from waterbodies on a site is being used for a *dairy*.
Hazardous Materials	
PO3 Dangerous goods, hazardous substances or environmentally hazardous materials are stored and handled in a manner that minimises the potential for contamination of surface and groundwater in the event of a leak or spill.	**AO3.1** The storage or handling of dangerous goods, hazardous substances or environmentally hazardous materials involves an aggregate quantity equal to or less than 200L or 200kg. **OR** **AO3.2** The storage or handling of dangerous goods, hazardous substances or environmentally hazardous materials with an aggregate quantity greater than

Performance Outcomes	Acceptable Outcomes
	200L or 200kg and less than 1000L or 1000kg maintains the following separation distances: (1) 50m to a stream order 1 to 3; (2) 100m to a stream order 4 to 7; and (3) 800m to an Urban Water Supply Storage area. **OR** **AO3.3** The storage of dangerous goods, hazardous substances or environmentally hazardous materials (other than petroleum products) in aggregate quantities greater than 1000L or 1000kg is not undertaken unless a site-specific risk assessment presents minimal risk to drinking water quality. ***Editor's note:*** *refer to* ***Water Resource Catchments Overlay Map - Streams and Dams OM-10-B*** *for the location of Stream Orders 1 to 3, Stream Orders 4 to 7 and Urban Water Supply Storage areas.*
	AO3.4 Dangerous goods, hazardous substances or environmentally hazardous materials with an aggregate quantity greater than 200L or 200kg and less than 1000L or 1000kg are located and stored in the following manner: (1) undercover in a building or similar structure; (2) in or on a dedicated impervious secondary containment store or device that permits full recovery of spills; and (3) in accordance with AS 1940:2004 The Storage and Handling of Flammable and Combustible Liquids. ***Editor's note:*** *refer to* ***Flood Hazard Overlay Map - Hazard Area OM-06-A*** *for an indication of areas with potential flood inundation.*

Table 8.2.10.3.2 - Water Resource Catchments Overlay Code - for Assessable Development

Performance Outcomes	Acceptable Outcomes
Wastewater (Other than Sewage)	
PO1 Development involving wastewater (other than sewage) does not discharge wastewater unless the drinking water supply environmental values are not compromised. ***Note****: Drinking water supply environmental values are contained within Schedule 1 of the Environmental Protection Policy (Water) 2009.*	**AO1** Development involving wastewater (other than sewage) collects and contains wastewater on-site, and is: (1) lawfully disposed to sewer; or (2) transferred off-site for treatment/disposal to an appropriately licensed facility; or (3) reused on-site in a closed-cycle irrigation scheme, industrial processes, washing/cleaning or other purpose; or (4) treated to meet the drinking water supply environmental values prior to release.

Performance Outcomes	Acceptable Outcomes
	***Note**: Where development involves the release of wastewater (other than sewage), a Wastewater Management Plan (WWMP) is to be prepared by a suitably qualified person. Plans are to provide an assessment of all risks and associated mitigation strategies for preventing adverse impact on the quality of drinking water and may require a water quality monitoring program.*
PO2 Where treated wastewater (not involving sewage) is irrigated to land, it: (1) is confined to a dedicated area of land on-site; (2) is suitably located and sized; and (3) uses irrigation practices that will not harm groundwater and on-site surface water quality. ***Note**: Developments involving the irrigation of wastewater may need to provide a MEDLI Modelling Report demonstrating the nominated land area for wastewater irrigation is suitably located and sized to accommodate design wastewater loads, storages are suitably sized to accommodate design wastewater loads, and proposed irrigation practices will not damage water quality. It is recommended the modelling exercise incorporate scenarios based on both a 10-year and 20-year planning horizon and incorporate a minimum of three irrigation concepts.*	**AO2** No Acceptable Outcome is prescribed.
Solid Waste	
PO3 Solid wastes generated by the development are managed, stored and disposed of in a manner that does not adversely impact on the quality of any surface water or groundwater.	**PO3.1** Development being an *Intensive animal industry* ensures*:* (1) the stockpiling of waste litter, manure and other organics is undertaken as follows: (a) on surfaces constructed with permanent impervious underlay to minimise leaching (groundsheets will only be accepted where stockpiling is temporary); (b) located outside of an effluent irrigation area; (c) located 3m above the seasonal high-water table and away from recharge areas; (d) sized to accommodate the proposed disposal timeframes; (e) designed with run-off diversion drainage upstream to prevent uncontaminated stormwater movement into the area; (f) bunded to capture contaminated run-off for appropriate treatment and disposal; and (g) covered, desirably within a shed but otherwise with weatherproof material; (2) the reuse of waste litter, manure and other organics as soil conditioners or fertilizers is not undertaken on-site; (3) composting activities are not undertaken on-site; and (4) carcasses are not buried on-site except as required in accordance with any emergency animal disease directive by a biosecurity agency.
	PO3.2 For all other development, no Acceptable Outcome is prescribed.

Performance Outcomes	Acceptable Outcomes
Sewage Treatment and Disposal	
PO4 Sewage treatment systems are designed, constructed and managed in ways that do not compromise the environmental values for the supply of drinking water. ***Note**: Drinking water supply environmental values are contained within Schedule 1 of the Environmental Protection Policy (Water) 2009.*	**AO4** No Acceptable Outcome is prescribed.
Stormwater Quality and Hydrology	
PO5 Development manages stormwater at the construction phase to protect the quality of water entering waterways and the Urban Water Supply Storage area. ***Note**: Drinking water supply environmental values are contained within Schedule 1 of the Environmental Protection Policy (Water) 2009.* ***Editor's note:** refer to **Water Resource Catchments Overlay Map - Streams and Dams OM-10-B** for the location of waterways and Urban Water Supply Storage areas.*	**AO5.1** An erosion and sediment control program (ESCP) demonstrates that stormwater will achieve the design objectives listed in **Table 8.2.10.3.5 - Construction phase – Stormwater Management Design Objectives** during the construction stage. **OR** **AO5.2** The ESCP demonstrates how stormwater quality will be managed so that target contaminants are treated to a design objective at least equivalent to **Table 9.4.2.3.2 - Construction Phase – Stormwater Management Design Objectives.**
PO6 Development avoids or minimises changes to the existing surface water natural hydrological regime so that: (1) there is no change to the reference high-flow and low-flow duration frequency curves, low-flow spells frequency curve and mean annual flow to and from waterways as a result of the development; (2) the collection and re-use of stormwater occurs so there is no increase to the velocity or volume of stormwater flows entering a waterway.	**AO6** No Acceptable Outcome is prescribed.
PO7 The design and location of artificial waterways: (1) use natural channel design principles to minimise erosion, flooding and maintenance while maximising ecological and aesthetic values of waterways; (2) are compatible with any existing natural waterways; and (3) are designed to ensure surface water hydrological regimes are maintained.	**AO7** No Acceptable Outcome is prescribed.
Hazardous Materials (Petroleum Products)	

Performance Outcomes	Acceptable Outcomes
PO8 Petroleum products are stored and handled in a manner that minimises the potential for contamination of surface and groundwater in the event of a leak or spill.	**AO8.1** The storage of petroleum products in bulk (greater than 1000L) aboveground uses self-bunded vessels that meet *Australian Standard AS 1692 Steel Tanks for Flammable and Combustible Liquids*. **OR** **AO8.2** The storage of petroleum products in bulk (equal to or greater than 100L) aboveground uses single-skin vessels installed within a bunded compound that: (1) is sufficiently impervious (permeability should be <10–9 m/s) to retain and recover spillage; and (2) has a net capacity of at least 100% of the bunded vessel or aggregate quantity of vessels where operated as a single unit. **OR** **AO8.3** Petroleum products belowground (greater than 200L) are stored in vessels that are non-corrodible, double walled with an interstitial space between, and meet the requirements of Australian Standard AS 1692: *Steel Tanks for Flammable and Combustible Liquids* and/or UL 1316 *Glass fibre reinforced plastic underground storage tanks for petroleum products, alcohols and alcohol gasoline mixture.*
Reconfiguring a Lot	
PO9 Where involving reconfiguring a lot for the creation of new lots, all lots requiring an on-site wastewater treatment system do not compromise the environmental values of drinking water supply. ***Note** - A wastewater site analysis is to be prepared by a suitably qualified professional demonstrating the opposite.*	**AO9** Any new lot can accommodate an area for on-site wastewater treatment and disposal complying with the separation distances and other locational criteria specified in **Table 8.2.10.3.4 — Separation Distance and Other Locational Criteria**.

Table 8.2.10.3.3 - Minimum Horizontal Separation Distances and Locational Criteria for Residential and Tourist Accommodation

Feature	Stream Order 1 to 3*	Stream Order 4 to 7*	Water supply well, bore &/or dam	Nearest cut embankment or other point where effluent might surface	Upper flood margin level of an Urban Water Supply Storage*	Flood immunity ^	Maximum Slope#
Development involving Primary treated effluent disposal	50m	100m	50m	30m	400m	AEP 1%	Located on a slope less than 15.1%
Development involving Secondary treated effluent disposal	30m	30m	30m	-	30m		
Development involving Advanced Secondary treated effluent disposal	10m	10m	10m	-	10m		

Refer to **Water Resource Catchments Overlay Map - Streams and Dams OM-10-B for the location of Stream Orders 1 to 3, Stream Orders 4 to 7 and Urban Water Supply Storage areas*
*^Refer to **Flood Hazard Overlay Map - Hazard Area OM-06-A** for an indication of areas with potential flood inundation.*
*#Refer to **Landslide Hazard and Steep Slope Overlay Map - Steep Slope OM-07-A** for an indication of areas with a slope 15.1% or greater.*

Table 8.2.10.3.4 — Separation Distance and Other Locational Criteria

Development type and activities	Stream Order 1 to 3*	Stream Order 4 to 7*	Urban Water Supply Storage Areas*	Flood immunity^	Maximum Slope#
Intensive animal industry	50m	100m	800m	AEP 1%	Located on a slope less than 15.1%
Aquaculture	Case-by-case basis	Case-by-case basis	N/A	N/A	
All other agricultural or forestry land uses	50m	100m	400m	Buildings – AEP 1% Other areas – AEP 20%	
Extractive industry	50m	100m	400m	AEP 1%	
Industry - Medium Impact, High Impact, Special, Marine	100m	100m	800m	AEP 1%	
Motor sport facility	50m	100m	400m	Buildings – AEP 1% Other infrastructure (e.g. trails) – AEP 20%	
Outdoor sport and recreation					
Major sport, recreation and entertainment facility					
Service station	50m	100m	800m	AEP 1%	
All other development types	50m	100m	400m	AEP 1%	

Refer to **Water Resource Catchments Overlay Map - Streams and Dams OM-10-B for the location of Stream Orders 1 to 3, Stream orders 4 to 7 and Urban Water Supply Storage areas*
*^Refer to **Flood Hazard Overlay Map - Hazard Area OM-06-A** for an indication of areas with potential flood inundation.*
*#Refer to **Landslide Hazard and Steep Slope Overlay Map - Steep Slope OM-07-A** for an indication of areas with a slope 15.1% or greater.*

Table 8.2.10.3.5 - Construction Phase – Stormwater Management Design Objectives

Issue	Desired Outcomes
Drainage control ***Note*** *- Refer to IECA 2008 Best Practice Erosion and Sediment Control (as amended) for details on the application of the Construction Phase requirements.*	(1) Manage stormwater flows around or through areas of exposed soil to avoid contamination. (2) Manage sheet flows in order to avoid or minimise the generation of rill or gully erosion. (3) Provide stable concentrated flow paths to achieve the construction phase stormwater management design objectives for temporary drainage works as specified in **Table 8.2.10.3.6 - Construction phase – stormwater management design objectives for temporary drainage works**. (4) Provide emergency spillways for sediment basins to achieve the construction phase stormwater management design objectives of: (a) 10% AEP where the design life is less than 3 months; (b) 5% AEP where the design life is 3-12 months; (c) 2% AEP where the design life is greater than 12 months.
Erosion control ***Note*** *- Refer to IECA 2008 Best Practice Erosion and Sediment Control (as amended) for details on the application of the Construction Phase requirements.*	(1) Stage clearing and construction works to minimise the area of exposed soil at any one time. (2) Effectively cover or stabilise exposed soils prior to predicted rainfall. (3) Prior to completion of works for the development, and prior to removal of sediment controls, all site surfaces must be effectively stabilised[1] using methods which will achieve effective short-term stabilisation.
Sediment control	(1) Direct runoff from exposed site soils to sediment controls that are appropriate to the extent of disturbance and level of erosion risk. (2) All exposed areas greater than 2500 metres^2 must be provided with sediment controls which are designed, implemented and maintained to a standard which would achieve at least 80% of the average annual runoff volume of the contributing catchment treated (i.e. 80% hydrological effectiveness) to 50mg/L Total Suspended Solids (TSS) or less, and pH in the range (6.5–8.5).
Litter, hydrocarbons and other contaminants	(1) Remove gross pollutants and litter. (2) Avoid the release of oil or visible sheen to released waters. (3) Dispose of waste containing contaminants at authorised facilities.
Waterway stability and flood flow management	(1) Measures are either installed prior to land disturbance and are integrated with erosion and sediment controls, or equivalent alternative measures are implemented during construction. (2) Earthworks and the implementation of erosion and sediment controls are undertaken in ways which ensure flooding characteristics (including stormwater quantity characteristics) external to the development site are not worsened during construction.

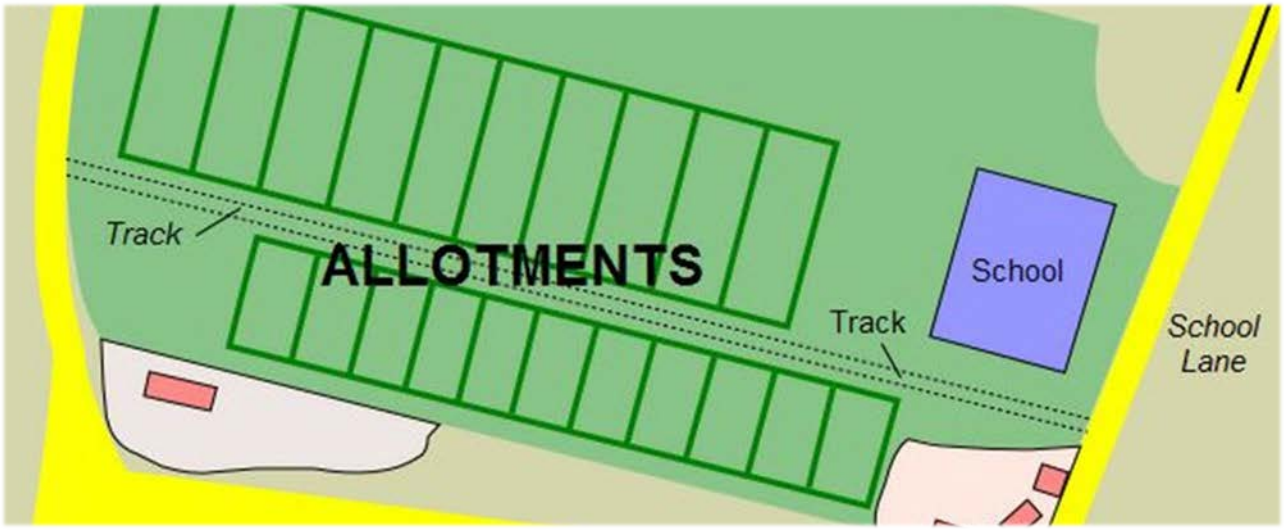
Note *- Drainage, erosion and sediment controls should be appropriate to the risk posed by the activity for the relevant climatic region e.g. considering the potential soil loss rate, monthly erosivity or average monthly rainfall.*

Note *- An effectively stabilised surface is defined as one that does not, or is not likely to result in visible evidence of soil loss caused by sheet, rill or gully erosion or lead to sedimentation water contamination.*

Table 8.2.10.3.6 - Construction phase – stormwater management design objectives for temporary drainage works

Temporary drainage works	Anticipated operation design life and minimum design storm event		
	< 12 months	12–24 months	> 24 months
Drainage structure	1 in 2 year ARI 39% AEP	1 in 5 year ARI 18% AEP	1 in 10 year ARI 10% AEP
Where located immediately up-slope of an occupied property that would be adversely affected by the failure or overtopping of the structure	1 in 10 year ARI 10% AEP		
Culvert crossing	1 in 1 year ARI 63% AEP		

8.2.11 Master Plan Areas Overlay Code



8.2.11.1 Application

This code applies to development:

(1) within the Master Plan Areas Overlay as identified on the overlay maps contained in **Schedule 2 Mapping**; and

(2) identified as requiring assessment against the Master Plan Areas Overlay Code by the tables of assessment in **Part 5 Tables of Assessment**.

8.2.11.2 Purpose and Overall Outcomes

(1) The purpose of the Master Plan Areas Overlay Code is to ensure that master planning is undertaken on identified sites where detailed planning has not been carried out.

(2) The purpose of the code will be achieved through the following overall outcome:

(a) Master planning is undertaken on sites where detailed planning has not been undertaken and for Reconfiguring a Lot to:

(i) actively promote the achievement of the Purpose and Overall Outcomes and specific Outcomes of applicable Zone Code provisions;

(ii) ensure that sites are planned and develop in an orderly and sequential fashion, with the necessary infrastructure and services provided in an efficient and timely manner;

(iii) provide certainty to the community by identifying the type and location of future land uses, infrastructure, and linkages to surrounding area; and

(iv) effectively manage land use conflicts within the development and with the surrounding area.

8.2.11.3 Assessment Benchmarks

Table 8.2.11.3.1 — Master Plan Areas Overlay Code - for Assessable Development

Performance Outcomes	Acceptable Outcomes
Master Planning	
PO1 Development is master planned to provide for: (1) best practice site planning, development layout and building design; (2) an efficient and affordable infrastructure network;	**AO1** No Acceptable Outcome is prescribed. *Note - To demonstrate compliance with this outcome, a Master Plan is prepared in accordance with **Planning Scheme Policy 3 - Preparing Master Plans for Development Applications**.*

Performance Outcomes	Acceptable Outcomes
(3) the sequencing and orderly staging of development; (4) neighbourhoods that respond to natural features such as topography, waterway corridors and significant vegetation; (5) the incorporation of best practice water sensitive urban design principles; (6) identification of distinct areas for specific uses or activities and intended treatments to minimise conflict between different uses; (7) mitigation of conflict with potentially incompatible uses (e.g. commercial/residential); (8) a safe, attractive and integrated street network based on the grid street pattern that maximises permeability, legibility, accessibility and street tree plantings; (9) the integration with adjoining urban areas in the locality; and (10) residential development (where consistent with the intent of the zone) where: (a) the siting of dwellings to take advantage of local micro-climate benefits to promote the construction of energy-efficient buildings and adequate solar access. (b) a wide range of housing types, densities and lot sizes are provided; and (c) smaller lots adjacent to areas of open space, community and recreation facilities; and (11) development that has the appearance of a modern country town, not suburbia and incorporates attractive and diverse facades that address street frontages and public and communal open space. ***Note** - The preparation of a Master Plan in accordance with **Planning Scheme Policy 3 - Preparing Master Plans for Development Applications** is the preferred method to demonstrate the achievement of this outcome.*	

8.2.12 Transport Noise Corridor Overlay

8.2.12.1 Application

This overlay contains no code and is for information purposes.

8.2.13 Minimum Lot Size Overlay

8.2.13.1 Application

This overlay contains no code and is to be used for administrative purposes. References to this overlay can be found in the following sections:

(1) **Part 3 Strategic Framework**
(2) **Part 5.6 Categories of development and Assessment - Reconfiguring a Lot**
(3) **Part 9.4.6 Reconfiguring a Lot Code**

8.2.14 Higher Order Roads Overlay

8.2.14.1 Application

This overlay contains no code and is to be used for administrative purposes. References to this overlay can be found in the following section:

(1) **Part 5 Tables of Assessment**
(2) Relevant sections of **Part 6 Zones**

8.2.15 Road Hierarchy Overlay

8.2.15.1 Application

This overlay contains no code and is to be used for information purposes.